



## **South Stream Offshore Pipeline – Russian Sector**

**Addendum to the Environmental and  
Social Impact Assessment (ESIA)**

**October 2014**



# Addendum to the Environmental and Social Impact Assessment (ESIA) South Stream Offshore Pipeline – Russian Sector

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# 1 Introduction

## 1.1 Purpose of the Environmental and Social Impact Assessment (ESIA) Addendum

This document is the post-disclosure Addendum to the Environmental and Social Impact Assessment (ESIA) Report for the South Stream Offshore Pipeline – Russian Sector (the Project).

The purpose of this ESIA Addendum is to:

- Update the draft ESIA with additional information, such as the results of further studies or modelling and information contained in answers given at public meetings;
- Provide details of the stakeholder engagement undertaken during the ESIA disclosure period;
- Respond to comments made by stakeholders during the ESIA disclosure period between 9 July and 10 August 2014;
- Respond to requests received during the ESIA disclosure for additional information; and
- Record new commitments made by the Project.

## 1.2 ESIA Disclosure

The draft ESIA Report for the Russian Sector of the South Stream Offshore Pipeline was disclosed on the 9 July 2014, and the ESIA disclosure period ran until the 10 August 2014. During this time, the draft ESIA Report was available in Russian and in English languages on South Stream Transport's website ([www.south-stream-offshore.com](http://www.south-stream-offshore.com)). In addition, ESIA documents and a Non Technical Summary (NTS) were distributed to key stakeholders for consultation and comment, and printed copies were made available for review at a number of locations within local community areas, as detailed in Chapter 2 below. This ESIA Addendum has been produced in response to comments and requests received during this disclosure process.

Six ESIA disclosure consultation meetings were held in July 2014 including four public community meetings which were publicly advertised. In addition, meeting invitations were extended to key stakeholders and for specific meetings. Further information on the ESIA disclosure consultation meetings is presented in Section 2.2 of this ESIA Addendum.

## 2 Stakeholder Engagement During ESIA Disclosure

### 2.1 Introduction

Stakeholder engagement is a critical part of the ESIA process and is on-going throughout the life of the Project. It is important to ensure that consultation and disclosure efforts are effective, and in particular that stakeholders have been meaningfully consulted throughout the process. Stakeholder engagement is managed through South Stream Offshore Pipeline's Environmental and Social Management Plan (ESMP) via the Project Stakeholder Engagement Plan (SEP) and Stakeholder and Consultation Database (SCD).

The following provides details of the consultation process that was followed during disclosure of the ESIA Report to stakeholders, including a description of the engagement mechanisms, the advertisement and notification process, and details of the consultation meetings. It also summarises the comments received during the ESIA disclosure period and how these comments have been considered and responded to in this ESIA Addendum.

South Stream Transport has developed a Grievance Procedure to ensure that complaints are addressed in a timely and consistent manner. A non-technical leaflet explaining the Feedback and Grievance Process has been prepared and is available on South Stream Transport's website at <http://www.south-stream-offshore.com/esia/stakeholder-feedback/>, which includes the various means by which stakeholders in Russia can contact South Stream Transport.

As certain Project activities had begun shortly before the time of the ESIA disclosure meetings this leaflet, the Feedback and Grievance Process brochure, had already been placed on the South Stream Transport website. In addition, the brochure had been directly distributed to local residents close to the construction activities, at the time of the start of pre-construction activities, to enable them to contact the Project directly prior to the ESIA consultation meetings.

Stakeholders were additionally informed about the Grievance Procedure during consultations on the ESIA Report and the Feedback and Grievance Process brochure was distributed at the consultation meetings.

### 2.2 ESIA Disclosure and Consultation

#### 2.2.1 Approach to ESIA Disclosure and Consultation

As described in **Chapter 6 Stakeholder Engagement** of the Draft ESIA Report, the consultation programme for the ESIA considered the combined outcomes of both EIA and ESIA engagement activities.

The focus of engagement activities during the ESIA process is to ensure that stakeholders are provided with the opportunity to:

- Access clear and appropriate information (i.e. non-technical, local language) information on the Project and its potential impacts;



- Provide feedback on the content of the ESIA including the assessment of impacts, and the proposed mitigation, management and monitoring measures; and
- Provide input regarding plans for future engagement activities, including preferences for methods, materials and schedule.

A targeted consultation programme for the ESIA disclosure involved identifying key stakeholders who could have an interest in the Project. Attention was focused towards the Local Communities of Anapa, Gai-Kodzor, Sukko, Rassvet and Varvarovka, due to their proximity to the Project area and where interest in the Project is highest. Therefore, in terms of location, it was determined to focus engagement activities in these areas.

Although a meeting was held at Supsekh in December 2012 during the scoping process, it was considered not necessary to hold further meetings in Supsekh for disclosure of the Draft ESIA Report due to the fact that Supsekh is geographically more distant than other communities to the Project and no Project access routes for heavy vehicles pass through Supsekh. All community meetings were publicly advertised and Supsekh residents were welcome to join any of the public meetings in adjacent communities. In addition, a secure comment box was placed in Supsekh along with hard copies of the ESIA Report including the schedule of disclosure meetings. Rassvet, which was identified as a Local Community after the Scoping Phase when Project access routes were finalised and therefore did not have a Scoping meeting, was added to the programme of ESIA disclosure meetings. Due to its location along the Project access route and susceptibility to impacts from Project related heavy vehicle traffic during the Construction Phase, Rassvet was identified as a key location for an open-house community meeting.

### **2.2.2 Disclosure of Draft ESIA Report**

The draft ESIA Report was disclosed, along with the NTS and SEP, on 9 July 2014. Announcements about the consultation meetings, including the date and timings, were communicated to stakeholders at the same time that the documentation was disclosed, via the press release, public announcement in the newspapers, direct invitations and a poster campaign in the Local Communities where the Project held meetings, all released and communicated two weeks in advance of the meetings to ensure that stakeholders had adequate time to receive the invitation and review the ESIA documentation.

The disclosure period ran for 30 days and ended on 10 August 2014. During this period, the ESIA documentation was made available as follows:

- Online at [www.south-stream-offshore.com](http://www.south-stream-offshore.com) along with a press release published online and distributed to media outlets announcing disclosure of the ESIA Report;
- Via a public announcement published in local newspaper Anapskoe Chernomorye (Figure 2.1) that provided details of disclosure of the ESIA Report, locations of comment boxes, and consultation meeting details;
- Printed copies were available for review at the following locations (along with secure comment boxes and comment forms):
  - Varvarovka Community Centre;
  - Rassvet Community Centre;

- Gai-Kodzor Community Centre (Figure 2.2);
  - Sukko DOL Elektron Shop;
  - Supsekh RD Administration; and
  - Anapa Department of Architecture and City Planning of Anapa Municipality.
- Posters were displayed at the comment box locations (see above), as well as local shops, bus stops, and notice boards in the following Local Communities:
    - Varvarovka;
    - Rassvet;
    - Gai-Kodzor;
    - Sukko; and
    - Supsekh.
  - Project information was sent directly to identified stakeholders including:
    - Emails with general invitation to attend the public community meetings with information on how to access the Draft ESIA report and NTS, both online and at comment box locations;
    - Emails to targeted stakeholders with invitation to attend roundtable meeting and information on how to access the Draft ESIA report and NTS, both online and at comment box locations;
    - Hard copy letters sent by post or hand delivered with printed NTS, along with information on the ESIA Disclosure consultation programme, invitation to attend and on how to access the Draft ESIA report and NTS, both online and at comment box locations; and
    - Upon direct request to South Stream Transport, via post, email, fax or telephone (SouthStream Transport contact details communicated via channels listed above) South Stream Transport has provided Project information, answered to comments or invited stakeholders to attend the consultation meetings. In the week following disclosure, the stakeholders who were invited to roundtable meetings were contacted by telephone to check they had received the documentation and meeting invitation and confirm their attendance. A few days before the ESIA Disclosure consultation meetings a reminder announcement was made in local newspaper Vasha Gazeta.

Figure 2.1 ESIA Disclosure and Consultation Meeting Newspaper Announcement in Anapskoe Chernomorye

**АЧ**

**South Stream**

**МОРСКОЙ ГАЗОПРОВОД ЮЖНЫЙ ПОТОК – РОССИЙСКИЙ УЧАСТОК**  
**ПУБЛИКАЦИЯ ПРЕДВАРИТЕЛЬНОЙ ВЕРСИИ ОТЧЕТА ПО ОВОСИСС**

South Stream Transport B.V. опубликовала предварительную версию Отчета по Оценке Воздействия на Окружающую Среду и Социальную Сферу (ОВОСИСС) проекта Морской газопровод Южный Поток – Российский участок («Проект»).

**Оценка Воздействия на Окружающую Среду и Социальную Сферу**  
Процесс ОВОСИСС был проведен в соответствии со стандартами и рекомендациями признанных международных финансовых институтов. Предварительная версия Отчета по ОВОСИСС была подготовлена независимыми международными экспертами и отвечает международным требованиям к проведению ОВОСИСС. В Отчете представлено:

- Описание Проекта;
- Описание проводимых мероприятий по взаимодействию с заинтересованными сторонами;
- Характеристики существующего состояния окружающей среды и социальной сферы, в том числе объектов культурного наследия в районе реализации Проекта;
- Оценки воздействия Проекта на окружающую среду и социальную сферу, в том числе объекты культурного наследия;
- Меры, которые будут предприняты для предотвращения или минимизации негативных воздействий Проекта, а также усиления положительных воздействий Проекта.

Кроме того, компанией South Stream Transport была проведена Оценка Воздействия на Окружающую Среду (ОВОС) в соответствии с требованиями Российской Федерации. В марте 2014 г. Государственной Экспертизой было выдано положительное заключение по проектной документации и материалам ОВОС Проекта.

**Встречи по обсуждению предварительной версии Отчета по ОВОСИСС**  
South Stream Transport B.V. приглашает местных жителей принять участие во встречах с общественностью для получения последней информации о планируемых строительных и подготовительных работах и графике их проведения.

South Stream Transport B.V. приглашает все заинтересованные стороны оставить отзывы относительно предварительной версии Отчета по ОВОСИСС. Полученные отзывы помогут гармонизировать, что материалы ОВОСИСС являются прочной основой для реализации дальнейших мероприятий в рамках экологического и социального мониторинга, а также гарантировать, что все важные и относящиеся к Проекту вопросы обстоятельно рассмотрены.

South Stream Transport B.V. проводит ряд открытых встреч, в рамках которых можно будет напрямую обсудить вопросы с нашими экспертами, а также общественными слушаниями, где будут представлены результаты ОВОСИСС и заинтересованным сторонам будет предоставлена возможность оставить свои отзывы относительно предварительной версии Отчета по ОВОСИСС. Полученные отзывы будут учтены при разработке окончательной версии Отчета по ОВОСИСС.

Даты и места проведения встреч представлены ниже:

Населенный пункт и формат встречи	Дата и время	Место встречи
Анапа Открытая встреча	22 июля 2014, 12:00 – 14:00	Конференц-зал «Гранд Отель Валькинг» Краснодарский край, г. Анапа, ул. Тополев, 103
Гай-Кодзор Открытая встреча	22 июля 2014, 12:00 – 20:00	Дом Культуры с. Гай-Кодзор Краснодарский край, г.к. Анапа, Гайкодерский СО, с. Гай-Кодзор, ул. Шаунина, 75
Вардаровка Общественные слушания	23 июля 2014, 12:00 – 18:00; 18:00 – 20:00	Дом Культуры с. Вардаровка Краснодарский край, г.к. Анапа, Супсоветский СО, с. Вардаровка, ул. Калинина, 69
Россиет Общественные слушания	24 июля 2014, 12:00 – 18:00; 18:00 – 20:00	Дом Культуры с. Россиет Краснодарский край, г.к. Анапа, Гайкодерский СО, с. Россиет, ул. Коммунаров, 41

**Предоставление комментариев относительно предварительной версии Отчета по ОВОСИСС**  
Предварительная версия Отчета по ОВОСИСС и Ресурсный Исследовательский Характеристика доступны в режиме онлайн на странице нашего интернет-сайта, посвященной ОВОСИСС:  
<http://www.south-stream-offshore.com/ru>  
Также на интернет-сайте доступна другая информация о Проекте, в том числе План Взаимодействия с Заинтересованными Сторонами для России.  
Документы в бумажном виде и копии для предоставления комментариев доступны по следующим адресам:

**Вардаровка:** Дом Культуры,  
Краснодарский край, г.к. Анапа, Супсоветский СО, с. Вардаровка, ул. Калинина, 69;

**Россиет:** Дом Культуры,  
Краснодарский край, г.к. Анапа, Гайкодерский СО, с. Россиет, ул. Коммунаров, 41;

**Гай-Кодзор:** Дом Культуры,  
Краснодарский край, г.к. Анапа, Гайкодерский СО, с. Гай-Кодзор, ул. Шаунина, 75;

**Сукко:** ДПО Электрон. Библиотека,  
Краснодарский край, г.к. Анапа, Супсоветский СО, с. Сукко, ул. Советская, 282-б;

**Сукоско:** Здание Администрации,  
Краснодарский край, г.к. Анапа, Супсоветский СО, с. Сукоско, ул. Фрунзе, 72;

**Анапа:** Здание Управления архитектуры и градостроительства ЮО г.к. Анапа, Краснодарский край, г. Анапа, ул. Тополев, 100.

Комментарии к Отчету по ОВОСИСС могут быть предоставлены до 10 августа 2014 г. путем отправки комментария в наши для комментариев, по электронной почте, оставления комментария онлайн или по почте.  
e-mail: [info@south-stream-offshore.com](mailto:info@south-stream-offshore.com)  
Форма для отправки комментария онлайн:  
<http://www.south-stream-offshore.com/esia/stakeholder-feedback/>

Отправка комментария по почте:  
South Stream Transport B.V. – Краснодарский филиал  
Россия, 350000, Краснодар  
Ул. Комсомольская, д. 15

**South Stream Transport B.V. – Группы по подготовке ОВОСИСС и получению разрешений**  
P.O. Box 809  
1082 LZ Amsterdam  
The Netherlands

**Информация о South Stream Transport B.V.**  
South Stream Transport B.V. является международным совместным предприятием в сфере планирования, строительства и эксплуатации морского газопровода через Черное море. Российская компания ОАО Газпром является держателем 50% акционерного капитала, итальянская компания Eni владеет 20% акционерного капитала и французская энергетическая компания EDF, а также немецкая компания Wintershall имеют доли по 15% каждая. Дополнительную информацию можно найти на сайте [www.south-stream-offshore.com](http://www.south-stream-offshore.com).

Проект Морской газопровод «Южный Поток» будет состоять из системы стальных газопроводов, включающих четыре параллельных нити диаметром 32 дюйма (813 мм) протяженностью примерно 931 км через акваторию Черного моря от российского побережья около г. Анапа, через Турцию и Ионическое Эгейское море (ИОЭ), к болгарскому побережью около г. Варна. Проект Морской газопровод «Южный Поток» будет частью Системы Газопроводов «Южный Поток», который по окончании строительства будет транспортировать природный газ из России в Центральную и Юго-восточную Европу.

**СТОРИИ**  
8 ИЮЛЯ 2014 ГОДА **5**

**БУРНЫЕ СВЯЗКИ**  
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**ИЗВЕЩЕНИЕ** о месте и порядке  
ознакомления с проектом межевания  
земельного участка участником общей  
долевой собственности земельного участка  
сельскохозяйственного назначения,  
находящегося в общей долевой  
собственности ЗАО АФ «Гостягивская»,  
местоположение: РФ, Краснодарский край,  
Анапский район, с/та Гостягивская,  
территория Гостягивского с/о

В соответствии со ст. 33 п.1 д.7-8 ЮЗ № 01 от 07.07.2002 г. участник долевой собственности **МИЛНИЧЕНКО Тамира Алексеевна** сообщает о своем намерении выделить земельный участок в счет земельных долей для сельскохозяйственного производства площадью 2,19 га. Почтовый адрес: Краснодарский край, Анапский район, с/та Гостягивская, ул. Чапаева, дом №7, кв. 3.

Проект межевания земельного участка подготовлен кадастровым инженером **Анатолием В.В.**, квалификационный аттестат 23-11-747, почтовый адрес: г. Анапа, ул. Валькингская, д. 1, кв. 9, адрес электронной почты – [info@af-gostyagivskaya.ru](mailto:info@af-gostyagivskaya.ru), тел. 8-918-3822912. Исходный земельный участок имеет кадастровый номер 23-37-0000000-74, расположенный по адресу: РФ, Краснодарский край, г. Анапа, с/о Гостягивский, ЗАО АФ «Гостягивская».

Местоположение выделяемого земельного участка: Краснодарский край, Анапский район, с/та Гостягивская, с/секция 18, контуры 28.29. С проектом межевания земельного участка можно ознакомиться лично, просмотрев документы, подтверждающие права участника общей долевой собственности кадастровых ЗАО АФ «Гостягивская», по адресу: г. Анапа, ул. Астраханская/ул. Заводская, 69/а/28, офис № 18.

Вручение или направление заинтересованным лицам обоснованных возражений относительно размера, местоположения границ выделяемого в счет доли земельного участка осуществляется по адресу: г. Анапа, ул. Астраханская/ул. Заводская, 69/а/28, а, офис № 18. Они принимаются с 09.07.2014 г. по 11.08.2014 г.

**О назначении публичных слушаний по предоставлению разрешения на условно разрешенный вид использования земельного участка, расположенного по адресу: г. Анапа, пр. Курортный, 33 (23-37-017002-26511)**

Постановление администрации муниципального образования город-курорт Анапа от 25 июня 2014 года № 2655

В соответствии со статьей 39 Градостроительного кодекса Российской Федерации, руководствуясь статьей 16 Устава муниципального образования город-курорт Анапа, статьями 3, 18 Положения о публичных слушаниях в муниципальном образовании город-курорт Анапа, утвержденного решением Совета муниципального образования город-курорт Анапа от 25 августа 2008 года № 334, распоряжением администрации муниципального образования город-курорт Анапа от 19 мая 2014 года № 62-р «О реорганизации обязанностей между заместителями главы муниципального образования город-курорт Анапа от 26 декабря 2013 года № 484 «Об утверждении правил землепользования и застройки муниципальное образование город-курорт Анапа применительно к части территории муниципального образования город-курорт Анапа», на основании заявления С.В. Васильевой от 3 июня 2014 года № 4706/1-14 постановлено:

1. Назначить публичные слушания по предоставлению разрешения на условно разрешенный вид использования земельного участка, расположенного по адресу: г. Анапа, пр. Курортный, 33 (23-37-017002-26511), – «для индивидуального жилищного строительства» на 18 июля 2014 года в 15.00 в здании администрации муниципального образования город-курорт Анапа по адресу: г. Анапа, ул. Крымская, 99 (малый зал).
2. Определить, что ознакомление с полной информацией о подготовке и проведении публичных слушаний, подача заявки для выступления на них жителями муниципального образования имеет возможность в территориальной администрации муниципальное образование город-курорт Анапа по адресу: г. Анапа, ул. Тополев, 100 (каб. 103), в приемные часы.
3. Контроль за исполнением настоящего постановления оставляю за собой.

**С. ЯРОВАЯ,**  
первый заместитель главы муниципального образования город-курорт Анапа

**Figure 2.2 Comment Box in Gai-Kodzor Community Centre**



### 2.2.3 ESIA Consultation Meetings

As shown in Table 2.1, consultation meetings were held in Anapa, Gai-Kodzor, Sukko, Varvarovka and Rassvet in July 2014. At these meetings, stakeholders had the opportunity to discuss the draft ESIA Report. The meetings allowed stakeholders to put forward their views on the ESIA and the mitigation measures proposed, and also to express their preferences for communication methods during future phases of the Project. The number of stakeholders invited to the drop-in sessions in Anapa and Gai-Kodzor and open-house meetings in Varvarovka and Rassvet have not been provided in the Table as these were public meetings for the general public published via newspaper announcement and poster. In addition the Project did send by email or post 169 'general invitation' letters containing details of all four meetings. Stakeholders could decide which meeting location was more convenient to attend.

**Table 2.1 ESIA Consultation Meetings**

Meeting	Date, Time	Location	Attendance
Drop-In Session, Anapa	22 July 2014 12.00 - 14.00	Grand Hotel Valentina	0 attended
Drop-In Session, Gai-Kodzor	22 July 2014 17.00 - 20.00	Gai-Kodzor Community Centre	7 attended (3 pensioners, 2 representatives from a housing/utility service company, 1 sustainability specialist and 1 community centre representative)
Roundtable Meeting with Marine Area Users, Fisheries, Tourism and Local businesses, Sukko	23 July 2014 14.00	DOL Energetik, Sukko	34 organisations invited, 9 stakeholders attended (6 marine area users, 2 business owners, 1 commercial port)
Open-House Community Meeting, Varvarovka	23 July 2014 17.00 - 20.00 (presentation commencing at 18.00)	Varvarovka Community Centre	34 stakeholders attended (21 local residents (including 10 pensioners and 11 employed in a number of professions e.g. religion, health service, cooking, building/painting, managerial etc.), 4 representatives from relevant gas distribution companies Gazprom Company, Gazprom Transgaz Krasnodar, Gazprom Gazoraspredelenie Krasnodar and Anapa Gorgaz, 3 local government representatives, 3 environmental NGOs, 2 academic and research institutes and 1 sustainability specialist)
Roundtable Meeting with Local, Regional and National NGOs, Anapa	24 July 2014 10.00 - 12.00	Grand Hotel Valentina	20 organisations invited, 8 stakeholders attended (8 representatives from environmental NGOs)
Open-House Community Meeting, Rassvet	24 July 2014 17.00 - 20.00 (presentation commencing at 18.00)	Rassvet Community Centre	21 stakeholders attended (21 local residents including 7 pensioners, 1 housewife, 13 employed in a number of professions e.g. entrepreneurs, education and culture, tailoring, cooking and building)

Representatives of South Stream Transport and URS, the independent consultancy who prepared the draft ESIA Report and led the ESIA stakeholder engagement consultation process, were present at all meetings. A representative from Gazprom Invest also attended meetings to address



any questions or comments directly related to the construction and operation of the Russkaya Compressor Station. The issue of gas distribution was raised during the scoping meetings in late 2012 as an issue of particular concern to residents in Varvarovka and Sukko. As a result, although this issue is outside the remit of the Project, South Stream Transport arranged for representatives of the responsible gas distribution companies Gazprom Company, Gazprom Transgaz Krasnodar, Gazprom Gazoraspredelenie Krasnodar and Anapa Gorgaz, to attend the community meeting in Varvarovka and respond to queries from the public regarding future gasification of local communities (see Section 3.15.1).

At all of the meetings, visual and printed materials were made available to support the presentations and discussion, and a hard copy of the full ESIA Report was available in Russian for review. USB sticks with the full ESIA Report, NTS and SEP and hard copies of the NTS, SEP and Feedback and Grievance Process brochure were also available to stakeholders who attended the meetings. In addition, there were visual displays illustrating various aspects of the Project and the ESIA process and translation was provided for all meetings (Russian and English) where necessary.

For all meetings, stakeholders were invited to provide comments and suggestions during the meeting itself and afterwards by filling out a Comment Form or submitting comments via the Project ESIA email address or by post. At the open house and roundtable meetings, participants also had the opportunity, after the formal question and answer sessions were finished, to speak individually with representatives of South Stream Transport and URS.

Open-house community meetings were held in the Local Communities of Varvarovka and Rassvet, where it was expected there would be most interest in the Project. The open-house consultation meetings were attended by local residents (both employed and pensioners), environmental NGOs, academic and research institutes and local government representatives. At 18.00 on both days, representatives of South Stream Transport presented information about the Project and representatives of URS presented the findings of the draft ESIA Report, followed by a 'Question and Answer' session. The venues were open between 17.00 and 20.00, so that stakeholders could visit before or after the presentation to discuss the Project and ESIA Report more informally with representatives and specialists from South Stream Transport and URS and ask questions.



**Figure 2.3 Open-House Community Meeting in Rassvet**



'Drop-in sessions' were held in Anapa and Gai-Kodzor. There was no formal presentation at the 'drop-in sessions'; rather, the room was arranged with three 'topic tables' (for 'Community', 'Ecology' and 'Project'), which were identified as key interest areas for stakeholders. On each topic table, there were representatives from South Stream Transport and URS Technical Specialists, who were available to answer stakeholder questions and address comments. This approach enabled the Project to conduct a targeted stakeholder engagement session, whereby stakeholders led the discussion according to their interests in the Project.

**Figure 2.4 Discussion between Local Residents and South Stream Transport at Community Topic Table of Gai-Kodzor Drop-In Session**



Two roundtable meetings were undertaken: in Sukko with marine area users, fisheries, tourism and local businesses, and in Anapa with local, regional and national NGOs. Stakeholders engaged in similar work and activities ensured a more focused discussion during these roundtable meetings, during which, similar to the open-house community meetings, South Stream Transport and URS conducted a presentation presenting the Project and the findings of the ESIA Report and welcomed questions and comments.

**Figure 2.5 Roundtable Meeting in Sukko with Marine Area Users, Fisheries, Tourism and Local Businesses**



In some meetings, particular themes emerged in the comments received. In Rassvet, comments related mainly to impacts from the road which passes through the community, including noise, dust and vibration and the impacts on the health and safety of local residents. Similarly at the drop-in session in Gai-Kodzor, stakeholders were concerned about noise, air and vibration impacts from increased traffic generated by the Project, as well as unplanned events, gasification of the local communities and interest in Project community investment and job provision and training. In Varvarovka, comments related to the impacts of increased Project traffic, the impact of construction activities on the environment and health and safety, noise and vibration from the Russkaya Compressor Station, gasification in the local communities, unplanned events and interest in jobs generated by the Project.

At the roundtable meeting with businesses in Sukko, most comments raised related to potential impacts on fishing activities and the impact of the Project on shipping and vessel routes, while the roundtable meeting with NGOs generated more comments about impacts on ecology and the terrestrial environment (e.g. impacts on protected species Juniper trees and Nikolski Tortoise).

The key themes of the comments and associated responses are provided in Chapter 3 of this ESIA Addendum and the full list of stakeholder comments received during the 30 day ESIA disclosure period is provided in Appendix 1 of this ESIA Addendum.

Comments made during the consultation meetings were responded to by the South Stream Transport and URS representatives present at the meetings and, where relevant, the representative from Gazprom Invest. Following the meetings, all the comments made during the meetings were further analysed and, in some instances, more detailed responses have been produced, using information gained from the ESIA process. These further detailed responses, together with responses to comments received via the comment boxes, are presented in this ESIA Addendum.

#### **2.2.4 Receiving Feedback from Stakeholders**

For the ESIA consultation and 30 day disclosure period, comments were welcomed by post, email, fax, telephone, or in person to the contact details provided via the South Stream Transport website, public announcement, press release, Feedback and Grievance Process brochure and direct invitations sent to stakeholders. Comments received outside the 30 day disclosure period are still recorded and considered by the Project as part of ongoing stakeholder engagement and these will be noted in updates to the Project Stakeholder Engagement Plan which can be found at <http://www.south-stream-offshore.com/esia/stakeholder-feedback/>.

### 3 ESIA Consultation Comments and Responses

This chapter provides details of the comments raised throughout the ESIA disclosure period. All comments received from stakeholders have been considered, and where relevant, addressed in this ESIA Addendum. Comments received have been categorised, and responded to, in alignment with the ESIA Report topic headings. In a number of instances a comment may relate to a number of topic headings. In these instances, a cross reference to other relevant sub-section(s) of this ESIA Addendum is provided as part of the response<sup>1</sup>.

In total, 180 questions, suggestions or comments were raised during the 30 day ESIA disclosure period; 110 during ESIA consultation meetings, 68 via the comment boxes and two 2 via email. No other comments were received via email or post during the disclosure period. The comments received during the ESIA disclosure period were split, where relevant, so each point a stakeholder raised could be provided with a tailored response. In some instances, particularly during the ESIA consultation meetings, a one-to-one dialogue was established with one stakeholder in which numerous points were discussed often relating to one specific topic. For information on the number and type of comments raised, refer to Appendix 1 of this ESIA Addendum. The list below provides an overview of the number of comments raised per topic area:

- Socio-economics: 63 comments;
- Community Health, Safety and Security: 24 comments;
- Project Description: 20 comments;
- Cumulative Impact Assessment: 16 comments;
- Terrestrial Ecology: 11 comments;
- Stakeholder Engagement: 6 comments;
- Unplanned Events: 4 comments;
- Soil, Groundwater and Surface Water: 2 comments;
- Analysis of Alternatives: 1 comment;
- Physical and Geophysical Environment: 1 comment;
- Marine Ecology: 2 comments;
- Waste Management: 2 comments; and
- Other Issues: 35 comments<sup>2</sup>.

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<sup>1</sup> The responses are intended to be technically correct at the time of writing. Due to the evolution of Project, this may not be the same as the response that was provided at the time the question or concern was raised..

<sup>2</sup> Other questions, suggestions or comments raised during ESIA consultation meetings either related to topics outside the remit of this ESIA Addendum such as, statements of support for the work undertaken in preparing the ESIA Report, or general queries related to technical and design aspects of the Project. These comments were directly responded to in the ESIA consultation meetings and are not further addressed in this ESIA Addendum. Questions related directly to the Russkaya Compressor Station are covered in Section 4 of this ESIA Addendum.

Where comments raised have been previously addressed in the ESIA Report, the responses in the following sections make reference to the section of the ESIA Report in which they are addressed.

### 3.1 Project Description

Comments in relation to the description of the Project covered a range of subjects and included queries regarding the Pipeline route, , which roads are to be used by the Project during construction, dredging activities in the Black Sea, the construction schedule, , vessel movement restrictions adjacent to the offshore Pipeline and questions regarding the microtunnelling process.

#### 3.1.1 Pipeline Route and Route Changes

Queries regarding the Pipeline route covered whether the pipeline would pass through Rassvet, from where would the pipeline start and where would it be laid in the landfall, nearshore and offshore sections. One comment sought clarification on perceived changes of the proposed route of the Pipeline. One comment requested the route of the Pipeline be altered to avoid the resort areas surrounding Anapa and the Black Sea.

The Pipeline route, including its onshore and offshore components, is described in Section 5.2.4, **Chapter 5 Project Description** of the ESIA Report, along with information on the spacing between pipelines and the construction and operational phase Exclusion Zones. **Chapter 1 Introduction** of the ESIA Report shows the route of the Pipeline in relation to the surrounding local communities (Figure 1.7).

In the event of change to the design or construction techniques as stated in the Draft ESIA Report, a management of change process will be followed to ensure environmental and social impacts are identified and, if necessary, mitigated.

The Draft ESIA Report, in **Chapter 4 Analysis of Alternatives** discusses the alternatives considered by the Project, including alternative means of gas transportation, which would avoid a gas pipeline, and the routing of the Pipeline. Alternatives for the location of the Landfall facilities, the type of engineering techniques and the onshore routing of the Pipeline in the local area were also considered and described in the ESIA chapter.

Selection of the Anapa landfall site and the Russkaya compressor station locations determined the area within which the Pipelines would be located. It should be noted that the Anapa Resort Town Sanitary Protection Area (SPA) was taken into consideration in the ESIA Report (refer to **Chapter 11 Terrestrial Ecology**). No significant impacts on the SPA are identified in the ESIA Report.

#### 3.1.2 Traffic Routes

A number of comments were received in relation to the roads to be used during construction including queries regarding road closures, which roads are to be used for the Project and which roads would be used by heavy vehicles.

The ESIA Report **Chapter 5 Project Description** (Section 5.3.3.1) describes the routes that will be used during the Construction Phase and sets out the temporary and permanent access roads that will be used by the Project.

In answer to two related questions, South Stream Transport confirmed that the pipelines installation and operation will not impact the road between Sukko and Varvarovka as the Project's pipelines will be housed in microtunnels so that they pass underneath this road at a depth of approximately 50 m. The road will therefore remain open during the Construction and Operation Phases; there are no planned temporary closures of the Sukko to Varvarovka Road.

South Stream Transport also confirmed that the road between Gai-Kodzor and Varvarovka would remain open during the Construction Phase, however, no heavy vehicles related to the Project will pass through the town of Gai-Kodzor. Heavy vehicle traffic will use the Gai-Kodzor bypass road constructed in 2013.

Once constructed, the Varvarovka bypass road will mean that Project construction vehicles will not travel through the town of Varvarovka. Whilst the bypass road is being constructed, a limited number of vehicles carrying equipment will travel through the town of Varvarovka in order to reach the site of the microtunnelling works so that works in that area can begin. Once this equipment has been mobilised, all further heavy vehicle traffic will use the Varvarovka bypass road.

As discussed in the ESIA Report, Project traffic will pass through the town of Rassvet and this item is discussed further in Sections 3.9.2 and 3.10.2 below.

### **3.1.3 Construction Schedule**

Five comments were raised in relation to the Project's construction schedule covering the timing of road works (both construction and use of roads), the overall timing of construction activities on land and at sea and the timing of activities and their relation to fishing. Another comment was made enquiring about whether sea surface and sea bottom activities would take place at the same time. In relation to how the timing of construction activities relate to fishing, this is covered in Section 3.1.4 Restrictions on Fishing Vessels.

Construction began in Russia in June 2014 with pre-construction and mobilisation activities. At the time of the ESIA disclosure meetings in July, activities underway included survey, mark-out, site establishment, office set-up and access road preparation.

The ESIA Report provides an indicative construction schedule (**Chapter 5 Project Description** Section 5.3.1 Indicative Construction Schedule) and it is stated that construction is scheduled to begin in 2014, with first gas from Pipeline #1 scheduled for late 2015, and all four pipelines fully operational by the end of 2017. Construction activities as currently scheduled at the time of writing are shown in



Table 3.1.

**Table 3.1 Indicative Construction Schedule**

Period	Construction Activity
Quarter 3 of 2014	Preparation for construction of the microtunnels begins
Quarter 4 of 2014	Start construction of the first microtunnel
Quarter 3 of 2014	Preparation for construction of landfall facilities begins
Quarter 3 of 2014 to Quarter 4 of 2016	Construction of the landfall facilities
Quarter 3 of 2014 to Quarter 3 of 2016	Construction of the four microtunnels
Quarter 4 of 2014	Start of offshore pipe-laying
Quarter 4 of 2015	Pipeline 1 becomes operational
Quarter 4 of 2016	Pipeline 2 becomes operational
Quarter 2 of 2017	Pipeline 3 becomes operational
Quarter 4 of 2017	Pipeline 4 becomes operational
Quarter 2 of 2016 to Quarter 4 of 2016	Restoration of landfall section

The four pipelines on the landfall section from the landfall facilities to the microtunnel entry shaft will be installed consecutively from late 2014 until Quarter 3 of 2015. They will be installed consecutively in a single construction period to minimise the length of disturbance. Restoration of the landfall and nearshore sections will not commence until successful pre-commissioning tests of these sections have been concluded."

For nearshore and offshore works, there will be surface activities taking place on the pipe-laying vessel at the same time as bottom surface activities such as pipe-laying. Nearshore construction activities will be limited in time and are currently scheduled as shown in Table 3.2.

**Table 3.2 Indicative Nearshore Construction Schedule**

Period	Activity	Duration
Q1 2015	Dredging at end of microtunnel 1, 2, 3 and 4	10 days each

Period	Activity	Duration
Q2 2015	Nearshore pipe-laying of pipeline 1 and 2 (up to 30 m depth)	2 days each
Q1 2016	Cleaning of transition trench 3 and 4	7 days each
Q1 2016	Nearshore pipe-laying of pipeline 3 and 4 (up to 30 m depth)	2 days each

Regarding the construction schedule for night time activities, the ESIA Report in **Chapter 10 Noise and Vibration** Section 10.6.1.6 describes the night-time construction activities as being microtunnel boring, operation of generator sets and pre-commissioning of the Pipeline. These activities are planned to take place from the end of 2014 to early 2016.

Regarding the timing of road construction activities, work on the Varvarovka bypass road is ongoing at the time of writing this ESIA Addendum. Work started in July 2014 and is planned to be completed by October 2014. In addition to the night time activities outlined in the ESIA, some of the bypass construction activity is being undertaken seven days a week and at night. This is being done in order to complete the bypass as soon as possible so that it can be used for Project traffic which therefore will not need to pass through the town of Varvorovka. The impact of night time and weekend construction activities related to the Varvarovka bypass road has been assessed after the completion of the ESIA Report as part of the management of change process and further mitigation measures are being discussed by South Stream Transport at the time of writing.

### 3.1.4 Restrictions for Fishing Vessels

Four comments were raised in relation to impacts on fishing from construction activities and restriction zones for fishing vessels operating in proximity to the Pipeline once it is operational. Clarification was requested on the timing of construction works, including on whether works would take place during the high fishing season from October to March.

Regarding restrictions for vessels, safety exclusion zones will be put in place along the pipeline route during both the Construction and Operational phases to avoid interactions between the Project's activities and existing marine traffic and fishing vessels in order to ensure the safety of both the Pipeline and third parties.

During the Construction Phase, a safety exclusion zone will be enforced around the pipe-laying spread. The zone will be approximately 2 km (1.1 nautical miles (NM)) radius for dynamic positioning vessels and approximately 3 km (1.6 NM) radius for anchored vessels (depending on the anchor spread). The safety exclusion zone will overlap with an area of fishing grounds and will restrict navigation and fishing within the zone. However, the safety exclusion zone will only take up a small part of the existing fishing grounds at any one time, and will move with the progress of the pipe-laying vessel. The spread will move at between 2 and 3.5 km per day. The safety exclusion zone will therefore move at the same rate, with the pipe-laying spread. In any given area, the safety exclusion zone will only be present for a short period (i.e. a few days during construction of the exit pits, and approximately 9 to 10 days for the laying process per pipe from

the exit pit to the edge of the fishing grounds at approximately 100 m water depth). These restrictions will be lifted behind the pipe-laying spread as the spread moves forward. Agreement with the appropriate marine authorities shall be obtained regarding the exact exclusion distance to be adopted during pipe-laying to avoid incidents with marine traffic.

Construction in the offshore area is due to begin third quarter (Q3) of 2014 (offshore pipe laying of pipeline 1, and will last until the end of 2017. However, nearshore dredging and pipe-laying activities, where most of fishing activities take place, will not start before early 2015 and will be short in duration (for more detail refer to Section 3.2.3 Construction Schedule above). During this time construction safety exclusion zones will be implemented during the period that the construction spread is undertaking dredging and pipe-laying activities. This restriction will be very limited in duration and area and should not impact ability of fishing vessels to access their fishing grounds (see paragraph above). It should be noted that permit conditions place a restriction on any construction activity taking place in waters to 100 m depth during the month of May, as this time coincides with the peak of the main spring anchovy migration.

During the Operational Phase it is anticipated that the exclusion zone will extend to 500 m either side of the outermost pipelines from the microtunnel exit pit until the Russian / Turkish EEZ boundary (except for a section on the Russian continental slope where the pipelines diverge into two groups of two). Commercial and fishing vessels will be authorised to navigate and fish above the pipelines. Certain activities such as anchoring and bottom trawling will not be permitted in order to protect the Pipeline and vessel equipment.

### **3.1.5 Microtunnelling**

A question was raised as to how material will be removed from the microtunnel during construction.

The Project will minimise the amount of soil discharged to the sea as a result of microtunnelling. The material generated during the microtunnelling process (e.g. drill cuttings / mud) will not be discharged to the exit pits (in the sea). Rather, it will be returned through the microtunnel to the surface at the entry shafts on the land side. There, the rock fragments will be separated from the drilling mud so that the drilling mud can be reused. The excavated soil / cuttings will be safely and temporarily stored until dry, and then transported to waste facilities where it can be disposed of.

At the point where the TBM reaches the end of the tunnel and connects through to the sea, there will be a small amount of material (slurry) that is released into the water as the TBM breaks through. In addition, the exit pits (in the sea) will be dredged prior to the TBM reaching that point (see Section 3.1.6 below). As part of the ESIA process, modelling was undertaken which showed that the dispersion of sediment will be a short distance in the water only (150-200 metres), and the sediment will be small and fine. There will be no drilling mud at all in the sea. With regard to impact upon the marine environment caused by discharge of this material into the sea, the ESIA Report states that due to the density of the material and the depth of the exit pits, it will not have any significant impact on benthos.

### 3.1.6 Dredging

Two comments related to dredging, clarification on whether dredging would be carried out on the seabed, and what the volume of spoil to be discharged into the sea is expected to be as a result of microtunneling.

Dredging will be undertaken in the nearshore section as part of the microtunnel exit pit construction; and in the offshore section to lay the pipe in a trench to ensure the stability and safety of the pipelines. It is anticipated that approximately 42,500 m<sup>3</sup> of seabed sediments will require to be dredged. Further details are provided in the ESIA Report **Chapter 5 Project Description** Sections 5.3.5.4 and 5.3.6.5.

### 3.1.7 Electricity

Other comments made included queries about connections to electricity substations. Answers were given during the meeting confirming that there are no plans to connect with electricity substations.

### 3.1.8 Operational Phase Pipeline Monitoring

One comment related to monitoring of the Pipeline on the seabed and the process for checking for damage.

The safe operation and construction of the pipeline are utmost priorities for South Stream Transport. **Chapter 5 Project Description** of the Draft ESIA Report describes the monitoring in place during operation. South Stream Transport will monitor pipelines using controlled monitoring for the pipeline using submersible robots and diagnostic Pipeline Inspection Gauges (PIGs) that can travel through the pipeline and check the condition of it and the pressure of the gas.

The external condition of the subsea pipeline will be monitored on a regular basis using a Remotely Operated Vehicle or Autonomous Underwater Vehicles and inspection technologies such as sonar scans and visual (camera) inspections. The PIG trap will be used to send and receive PIGs during pre-commissioning tests and to receive PIGs during maintenance activities in the Operational Phase. PIGs are used for activities such as checking for defects (gauging), cleaning, drying and inspection of the inside of the pipeline.

The landfall facilities will have local emergency shutdown (ESD) and safety systems. Should there be an incident (unplanned event), the ESD system will be triggered and the pipelines will isolate themselves. The gas volume in the pipelines will then be automatically isolated from the landfall facilities.

## 3.2 Stakeholder Engagement

### 3.2.1 Media Coverage

A comment was made stating that there was too little media coverage relating to the Project which has led to rumours being generated in local communities.

Through the stakeholder engagement process, South Stream Transport has engaged with the media at key milestones in the Project such as scoping and ESIA consultation, by issuing press releases and public announcements in the local newspapers, to communicate the disclosure of documentation and details of consultation meetings. Specific events have also been organised for members of the media to enable them to find out more about the Project.

To further improve communications and information flow, South Stream Transport has appointed a Community Liaison Officer who will continue to engage with local communities on a regular basis.

### **3.2.2 Accessibility and Quality of ESIA Information**

A comment was made that the ESIA is difficult to understand due to the amount of technical language that it contains and that the translation may not always have been accurate. Another comment questioned whether the Draft ESIA Report contained sufficient information in certain areas, for instance in relation to pollution in the Black Sea it was questioned if there was sufficient baseline and information on monitoring on this issue.

It is acknowledged that due to the technical nature of the ESIA, there may be instances where different technical terms are used and errors in translation may have occurred. To assist readers, a Non-Technical Summary (NTS) has been produced that summarises the key points in terms of Project description, baseline and impacts. This NTS was made available during the disclosure and consultation process and can be found on the South Stream Transport website ([www.south-stream-offshore.com](http://www.south-stream-offshore.com)). Regarding the level of information in the ESIA Report on certain issues, the questioner was directed to the full ESIA Report for more detailed information on various issues.

### **3.2.3 Survey Data and Monitoring Results Availability**

Two comments enquired as to whether data from surveys and monitoring would be publicly available.

All the information in the ESIA Report is publicly available. Future surveys and monitoring results will be analysed and used for management of Project activities. Some of this monitoring information will be made publicly available through publishing annual reports, while some reports will be submitted to relevant authorities, financing organisations and other stakeholders.

### **3.2.4 Notification of Construction Activities and Project Changes**

Two comments requested the local community is kept informed about construction activities and a further comment requested continual updates about the Project to keep the local community informed on Project changes so that communities are up to date and can influence Project design.

Regarding the Project and keeping the local community informed of Project activities, the Project has committed stakeholder engagement to continue over the life of the Project throughout the Construction and Pre-commissioning, Operational and Decommissioning Phases. South Stream Transport will continue its stakeholder engagement activities through the Construction Phase and to further improve communications and information flow, South Stream Transport has appointed

a Community Liaison Officer who will continue to engage with local communities on a regular basis and ensure communities are informed about Project activities. Engagement plans are described in the Russian SEP which can be found at <http://www.south-stream-offshore.com/esia/stakeholder-feedback/>.

### 3.2.5 Other

Another comment expressed dissatisfaction on receiving no response for previously requested data regarding pipeline route and bathymetry. South Stream Transport has given the approximate location of the pipelines in the ESIA Report. Once constructed, the Pipeline location will be included in navigation charts. South Stream Transport also explained that a Community Liaison Officer has been appointed to improve communication channels and will respond to data requests.

One attendee enquired about the presence of Local Administration representatives. South Stream Transport explained during the meeting that South Stream Transport are in regular contact with the Gai-Kodzor Administration and would be willing to discuss issues with the Local Administration.

## 3.3 Physical and Geophysical Environment

A comment suggested that insufficient meteorological surveys had been undertaken, and highlighted the importance of meteorology for planning of construction activities in relation to impacts such as erosion and landslide.

**Chapter 7 Physical and Geophysical Environment** Section 7.4.1 of the ESIA Report describes the meteorological conditions in the Project Area using data collected by the Krasnodar Regional Centre for Hydrometeorology and Environmental Monitoring. The data obtained includes long-term climatic characteristics for the period from 1977 to 2009 at the nearest weather station to the Project, which is located in Anapa, 5 km north of the proposed pipeline route. It is considered that this data is sufficient to inform the ESIA.

These data has been considered in the assessment, and in the design of mitigation measures, for example as described in **Chapter 8 Soils, Groundwater and Surface Water**, Section 8.6.2 of the ESIA Report.

## 3.4 Soils, Groundwater and Surface Water

Concern was raised as to the potential impact on the River Kotlama. A separate comment raised the issue of temporary storage of spoil created by the early works along the Varvarovka bypass road route and the associated risk of a landslide. The resident requested that the material be removed within three months.

### 3.4.1 Surface Water

The River Kotlama is located to the east of Rassvet within the vicinity of the M25. It is outside the Study Area and Zone of Influence used within the assessment on soils, groundwater and surface waters and is not considered to be a receptor or impacted by the Project.



### **3.4.2 Storage of Spoil**

The temporary spoil storage pile, located adjacent to the proposed Varvarovka Bypass Road, was commented upon at the Varvarovka community meeting and a commitment was made by South Stream Transport representatives to begin reducing the height of the pile. After the meeting, representatives of South Stream Transport spoke further with the local resident concerned and inspected the spoil storage pile. The spoil storage pile was initially reduced in height and volume, however due to construction constraints further spoil has subsequently been added to the pile. The risk of spoil spilling from the pile is being addressed through the installation of concrete barriers around the pile and the situation is being monitored daily. At the time of writing, the Project has also committed to the installation of standard security fencing around the pile to prevent unauthorised access to pile thereby further ensuring public safety. As soon as reasonably practicable, the material will be reused or taken off site to a licenced disposal facility by end of November 2014.

## **3.5 Air Quality**

Comments made in relation to air quality concerned dust and pollution from construction traffic (particularly in Rassvet) and clarification requests regarding emissions from the Russkaya Compressor Station. Comments on air quality impacts from construction traffic were often communicated alongside related comments including, for example, issues in relation to noise and vibration, community safety and compensation for damage as a result of impact to buildings from construction vehicles. These comments and their associated responses are provided within Section 3.10 Socio-Economics and Section 3.11 Community Health, Safety and Security of this ESIA Addendum.

Comments regarding air quality impacts from the Russkaya compressor station are provided in **Section 3.14 Cumulative impact Assessment** of this ESIA Addendum.

## **3.6 Noise, Vibration and Lighting**

The majority of comments relating to noise and vibration were associated with construction vehicles passing through local communities, in particular, Rassvet. Comments related to complaints regarding the duration and scale of noise impacts and impacts upon specific receptors, (such as a kindergarten). Other comments were raised regarding night time noise and lighting impact from construction vehicle movements and requests for further mitigation, including specific requests for acoustic barriers. Comments on noise, vibration and lighting impacts from construction traffic were often communicated alongside related comments including, for example, issues in relation to dust, community safety and compensation for damage as a result of impact to buildings from vehicles. These comments and their associated responses are provided within Section 3.10 Socio-Economics and Section 3.11 Community Health, Safety and Security of this ESIA Addendum.

Comments made also included a general request for further information relating to noise and vibration impacts associated with the Russkaya Compressor Station. These comments are discussed in Section 4 of this ESIA Addendum.

Further information was requested on the duration of night-time noise and relevant mitigation measures. The ESIA Report concluded that in the absence of mitigation, there would likely be a high noise impact experienced by receptors adjacent to the booster compressor plant during the Pre-Commissioning Phase. Regarding the assessment undertaken as part of the ESIA, the assumptions made for 'Octave Band Centre Frequency / Hz' in relation to the plant and booster compressors is based on manufacturers information and is presented in *Table 10.14 Summary of Source Reference Sound Power Levels / dB(A)* within the ESIA Report. The data used provides a worst case assessment.

With regard to the specification of mitigation measures, the degree of mitigation cannot be provided at this point in time, as the extent of mitigation will be dependent upon how great a reduction in noise levels can be achieved by the selection of inherently quiet plant.

When the details of plant and equipment for the compressor spread operations becomes known, South Stream Transport will complete a noise assessment which models noise, with inclusion of night-time noise levels. This will inform the noise mitigation measures and monitoring requirements as proposed in the ESIA Report.

### **3.7 Terrestrial Ecology**

Eleven comments were received that related to terrestrial ecology. Two comments related to the potential adverse effect the Project could have on existing nature.

One comment requested that grass cover, shrubs and trees are restored after construction. Another comment questioned if compensatory planting for cleared areas would be of the same value as existing habitat and that particular care should be given to the protection of the seashore. The potential for impact on the Anapa Special Protection Area was also raised.

Concern was raised in one comment regarding the impact on species and habitat, particularly Nikolski's Tortoise and juniper woodland. A request was made to avoid removal of plants and to clarify the area of forest to be cleared. One participant asked specific questions regarding the relocation of protected juniper from the Project area such as the location of the replanted junipers and the survival rates and requested to participate in the monitoring of the juniper trees that have been planted by the Project to further understand the extent to which establishment has been successful. The number of tortoises that will be relocated was queried. Clarification was requested on whether reptile fences will be removed after construction.

#### **3.7.1 Reinstatement and Restoration**

Regarding the reinstatement of vegetation, the majority of the areas where works are undertaken will be reinstated, including the area where spoil is being stored. Restoration of the landfall and nearshore sections will not commence until successful pre-commissioning tests of these sections have been concluded."

#### **3.7.2 Impact on Nature**

**Chapter 11 Terrestrial Ecology** of the Draft ESIA Report presents an assessment of the potential impacts of the Project on terrestrial ecology. A series of mitigation measures were

developed to ensure impacts upon local habitats and species were managed. Part of the mitigation measures include reinstatement of vegetation and translocation of protected species to prevent harm to them during construction.

The terrestrial ecology assessment concludes that impacts to habitats and species will be avoided or reduced through Project design and, where necessary, through a suite of mitigation measures that will reduce the magnitude of all impacts to low or negligible levels. Subject to the implementation of the identified mitigation measures, the impact on all species, regardless of their sensitivity, is assessed as being either Not Significant or of Low significance.

### 3.7.3 Nikolski's Tortoise

The ESIA is written to international and national standards for the protection of biodiversity. Under international standards, a critical habitat assessment was undertaken for critically endangered species as well as for endemic species and unique ecosystems.

Identifying a critical habitat has also meant that added conservation actions will be implemented for Nikolski's tortoise. The terrestrial ecology Study Area (as defined in **Chapter 11 Terrestrial Ecology** of the ESIA Report) supports approximately 150-350 individuals, which in ecological terms, is considered to be a significant portion (at 2-5%) of the regional 'restricted range' population of this sub-species within the Abrau peninsula. As part of the ecological assessment work, the population survey initiated in 2013 was continued in 2014,. A Biodiversity Action Plan (BAP) is being developed to deliver net gains in these key biodiversity features. The BAP will be subject to periodic updates based on monitoring and research results and the success of habitat management actions.

South Stream Transport has received a permit to relocate the tortoises. Fences are being installed along the access roads and other construction zones. These fences prevent animals from entering the construction site. The construction area is split into sections so that each section can be searched prior to clearing. Vineyards are cut manually to avoid using large machines that could potentially kill fauna. At the end of construction, the fences will be removed.

Approximately 70 tortoises have been removed from the South Stream Offshore Pipeline Project Area (not GPI area) to date (August 2014). Inspectors from Krasnodar Krai RPN also participated in monitoring the relocation on site. As part of this process, Krasnodar Krai RPN will be signing off the relevant documentation and verifying the number of tortoises that have been found and relocated.

### 3.7.4 Juniper Woodland and Other Forest

**Chapter 11 Terrestrial Ecology** of the ESIA Report states that a total of 7.5 ha of different forest habitats will be cleared for the Project with a total of 5.1 ha of this forest lost permanently due to the Project Right Of Way.

South Stream Transport received a permit to remove and relocate protected junipers in April 2014. Of the juniper trees removed, 152 trees are below 2.5 m in height and eight trees are above 2.5 m in height. South Stream Transport obtained the necessary permission to replant the junipers in Anapa Park. It was not possible to replant the eight trees higher than 2.5 m as they

would not survive the relocation. In April 2014, 188 junipers were replanted and are being monitored each month. The survival rate is currently more than 95%. South Stream Transport have restored vegetation that was cleared as part of the geophysical survey work that took place at the top of the cliff south of Varvarovka. During cliff reinstatement activities, 530 small junipers were transplanted.

### **3.7.5 Anapa Sanitary Protection Area**

With regard to the Anapa Sanitary Protection Area, it is acknowledged that habitats and plant and animal species are important components of the Sanitary Protection Area (SPA) and contribute to the town of Anapa's status as a resort area. After construction, the pipeline corridor will be restored. There will be no residual impact to the seashore as the pipelines are microtunnelled underneath the cliff face with the exit pits out to sea. With implementation of the mitigation measures identified within the ESIA Report, the potential impacts on habitats, plants and animal species associated with the SPA will not be significant.

## **3.8 Marine Ecology**

Comments related to anchovy fishing are responded to in **Section 3.10 Socio-Economics** of this ESIA Addendum.

One comment was made regarding monitoring marine species such as dolphin.

The Project has undertaken marine mammal baseline surveys in 2010, 2011 and 2013.

An environmental monitoring plan has been developed for the Russian national EIA process, as required by Russian regulations, comprising construction and post construction monitoring of water, sediments, plankton (including phytoplankton, zooplankton and ichthyoplankton), benthos, fish, birds and mammals. The precise details (e.g. location of sampling stations etc.) may need to be revised in future, but in principal, this will form the basis for monitoring in the Russian sector.

With regard to marine mammals, monitoring of cetaceans during construction will be carried out both from vessels and from the shore. All researchers, including Russian contractors, will be trained on how to undertake this monitoring. Biodiversity monitoring will be integrated into the Project's overall Environmental and Social Management System (ESMS). In this way, the results of the program can be clearly linked to management actions and the results used to evaluate the effectiveness of the mitigation strategy. Further detail is provided in the Project's Environmental and Social Management Plan (ESMP) described in **Chapter 22 Environmental and Social Management**.

## **3.9 Socio-Economics**

### **3.9.1 Employment and Training**

A number of questions were raised relating to the provision of local jobs and training. A resident from Rassvet offered their skills for a position on the Project.

Many of the skills required for construction of sub-sea gas pipeline infrastructure, including those required for microtunnelling to reach the sea, are specialised, and may not be available in local communities. Therefore, South Stream Transport will draw in expertise from a wide geographical area, often internationally.

However, South Stream Transport, where practicable, will encourage the use of local labour. Local employment may also be supported by local business contracts that may arise through goods and services procurement. Project contracts have been required to locally advertise suitable available positions and contracts.

So far, approximately 60 people from the local area have secured employment through Project contractors. They are working in positions such as security, maintenance, and also as secretaries, drivers and catering. South Stream Transport will continue to encourage its contractors to hire local people, but so far it has not been fully possible to find the suitable people from the closest local communities because of the specific skills needed for the Project.

The contact details of the applicant from Rassvet were given to South Stream Transport Contractor for consideration. Support for training initiatives may be considered in the development of the Community Investment Programme (see Section 3.10.7 of this Addendum Report).

### **3.9.2 Traffic – Rassvet**

A high proportion of comments related to the impacts being experienced by Local Communities as a result of construction vehicles passing through the community of Rassvet. Comments ranged from expressions of annoyance over the presence of construction vehicles to complaints that a bypass road had not been built or that other mitigation measures had not been put in place to avoid construction vehicles passing through Rassvet or to reduce impacts such as the generation of dust. Comments relating to community health and safety issues were also raised; these comments are responded to Section 3.10.2.1 Preliminary Results of Rassvet Traffic Assessment and in Section 3.11 Community Health, Safety and Security of this ESIA Addendum.

South Stream Transport acknowledged that the town of Rassvet has recently been experiencing a relatively high level of traffic through its centre along Kommunarov Street as increased levels of heavy vehicles have been passing through the town since construction of the Russkaya CS began. During the meeting, South Stream Transport representatives outlined planned mitigation measures for the future Project traffic impacts which are based on the assessment of traffic impacts undertaken for the ESIA. It was noted that, in line with commitments in the ESIA Report in **Chapter 15 Health, Safety and Security**, further assessment was being undertaken at the time of ESIA disclosure (Rassvet Traffic Assessment) and additional mitigation measures may be considered as are result of the study. For the purposes of this ESIA Addendum, an outline of the preliminary findings of the Rassvet Traffic Assessment is provided below.

#### **3.9.2.1 Preliminary Results of Rassvet Traffic Assessment**

A series of site visits were undertaken during the week commencing 18 August 2014 for the assessment and these visits were informed by the comments made by Rassvet residents during the ESIA disclosure meeting in Rassvet in July. The assessment team included transport planning and social specialists from the independent ESIA consultant, URS. During the site visit,

observations were recorded including driver behaviour and the aspects that resulted in noise, potentially unsafe conditions and the creation of dust in the atmosphere. Measurements were taken of the highway carriageway and the footways, as well as a review of their state of repair. A photographic record of conditions was also made.

### **Initial Observations**

The speed limit through Rassvet is 30 kilometres per hour (kph) which is lower than the usual national standard limit of 60kph for an urban area. From visual observation it was concluded that a number of vehicles, including construction vehicles, were travelling faster than the speed limit.

There is a single formal pedestrian zebra crossing point on the main road through town. It is well located with respect to the major pedestrian desire lines, in particular those from the east of the village to the school, kindergarten, southbound bus stop and the shop located just north of the kindergarten. The zebra stripe markings have worn badly and the crossing does not make a direct paved connection with a formal footway on either side. This, together with the poor state or non-existence of the crossing points, encourages pedestrians to walk along the gravel shoulder.

There is an existing footway running for most of the length of the route through the village adjacent to the property line on the west side of Kommunarov Street (the main road through the town). The surface is often very uneven and the quality of the footway varies between reasonable to very poor. It is also particularly narrow in some areas, in many cases as a result of being overgrown by thick grass. As a consequence, pedestrians, particularly vulnerable pedestrians such as older inhabitants and parents with children in pushchairs, tend to use the gravel shoulder in preference to the footway.

The footway on the eastern side of Kommunarov Street has largely disintegrated or has been completely overgrown and obscured by soil and grass, and so only remains in short sections. In some instances, owners of properties on Kommunarov Street have undertaken works that will make the reinstatement of this footway difficult. Although some sections of the original footway are still usable they usually lead to informal paths unintentionally created by frequent passing pedestrians that lead to the gravel shoulder which is then used to walk along the road. The lack of crossing points and the absence in many places of an acceptable footway, either west or east of Kommunarov Street, results in pedestrians using the gravel shoulder which poses a direct threat to pedestrian safety. Vehicles driving onto the shoulder of the road because of the absence of a kerb defining the edge of the road and its limited width further increases the safety risk for pedestrians and especially children wandering onto the carriageway or playing close to it.

Increased construction vehicle movements from Gazprom Invest or South Stream Transport construction activities have a direct impact on noise levels for inhabitants living along Kommunarov Street and may be particularly disturbing at night.

Four principal causes of dust generation were identified:

- Vehicles travelling on the gravel shoulder;
- The slipstream of vehicles travelling along the road disturbing the loose earth lying on top of the road shoulder;



- The slipstream of vehicles disturbing the dust created by the action described in the previous bullet point that had landed on the carriageway; and
- Vehicles pulling off the carriageway onto the areas in front of the shops located along the roadway, in front of the Rassvet community centre and also the post office.

### **Mitigation measures under consideration**

The Rassvet Traffic Assessment will formulate specific mitigation measures to reduce the risks and impacts associated with Project construction traffic through Rassvet. Mitigation measures are still being studied and will be selected taking into account their effectiveness, practicality and speed of implementation, and advantages and disadvantages. The possible mitigation measures currently under consideration are:

- Enforcement of the speed limit of 30 kph in order to reduce noise and dust generation as well as improve pedestrian safety. Effective ways to enforce the speed limit could include increased traffic surveillance by police, or by third parties backed up by disciplinary measures for Project construction drivers;
- Improvement of the existing pedestrian crossing and the installation of additional crossings will be considered and proposed to the relevant authorities;
- Upgrade and restoration of the footways alongside the west and east sides of Kommunarov Street;
- Surfacing the forecourts of the community centre, kindergarten, post office and the shop north of the kindergarten to reduce dust emissions;
- Installing double glazing in houses adjacent to Kommunarov Street to reduce noise levels; and
- Water spraying, potentially with dust binder additives, in order to decrease dust released, especially from vehicles driving outside the carriageway.

After the Rassvet Traffic Assessment has been finalised, it will be discussed with the relevant authorities and the local community and its measures proposed implemented as part of South Stream Transport's management plans during the remainder of the Construction and Pre-Commissioning Phase [new commitment].

### **3.9.2.2 Rassvet Bypass Option**

Regarding the requests for a bypass road at Rassvet, South Stream Transport considered the option of building a bypass road around Rassvet<sup>3</sup>. During discussions with the relevant administrations, South Stream Transport was informed that it would not be possible to construct a bypass around Rassvet. South Stream Transport is therefore currently developing a number of traffic mitigation measures (refer above) to minimise adverse impacts.

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<sup>3</sup> Gazprom Invest considered the option of building a bypass around Rassvet and held similar discussion with the relevant administrations which also concluded that a bypass would not be possible.

### 3.9.3 Traffic – Varvarovka

A question was raised about the possibility of installing pedestrian footways adjacent to the Varvarovka bypass road and whether a noise protection screen will be built alongside the Varvarovka bypass road in the area of North East Varvarovka.

At the Varvarovka community meeting, South Stream Transport arranged to meet with the affected resident to discuss the bypass road design and the possibility of building a pedestrian footway alongside the road. During these discussions it was confirmed that for safety reasons South Stream Transport will not install a pedestrian footway along the Varvarovka bypass road as it will be a route used by Project heavy construction vehicles.

The ESIA report includes a proposal for a noise barrier as a mitigation measure for predicted high noise levels from construction traffic on the Varvarovka bypass where the road lies nearest to residential properties (North East Varvarovka). At the time of the meeting it was still being assessed whether a noise barrier would be the most appropriate noise mitigation measures. Subsequent to the meeting alternative measures have been discussed with local residents such as the installation of double glazing. The final mitigation measures will be agreed between South Stream Transport and the affected residents. At the time of writing, no noise mitigation measures have been agreed with the local community or implemented.

### 3.9.4 Fisheries

Clarification was sought on any associated restrictions that would be placed on fishing vessels during the Construction and Pre-Commissioning Phase and the Operational Phase, including the timing of construction works. These comments are addressed within **Section 3.2.4 Restrictions on Fishing Vessels** of this ESIA Addendum.

Comments on monitoring of Project activities on fishing were also raised. One question was raised as to whether anyone from research institutes had been involved in research for the Project and whether this information was available to the public.

Between 2009 and 2013, scientific institutions such as VNIRO and AzNIIRKH were involved in undertaking fishing studies and preparing the reports that were presented to the Federal Fishery Agency (FFA). Their work involved a number of environmental surveys. During the EIA, this information was published on the South Stream Offshore Pipeline website. Where relevant, information collected by and reported on by these organisations has been drawn upon and used to inform the Fisheries Study undertaken by specialist fisheries consultant MRAG Ltd (**Appendix 14.1 Fisheries Study** of the ESIA Report).

Two comments sought assurance that the Project would not impact upon anchovy.

The potential interaction between the construction schedule and activities and fish migration routes and spawning areas has been considered in both the EIA and ESIA Reports. Impacts on fishing and fish stocks are assessed in **Chapter 12 Marine Ecology** and **Chapter 14 Socio-economics** of the ESIA Report. As part of the ESIA process, an international specialist company from the UK (MRAG Ltd) prepared a separate fisheries study for the Project which can be found in **Appendix 14.1 Fisheries Study** of the ESIA Report. The study examined potential impacts on fishing grounds, access, and fish stocks. Local fishing companies and government institutions,

were consulted during this process to assess fishing and migratory issues. The study concluded that no significant impact on fish migrations, or fisheries activities, in Russian waters is expected.

To ensure the avoidance of any impacts during the sensitive spawning season, the decision of the Federal Fisheries Agency for the Project does not allow coastal construction to be undertaken in May, when spawning takes place.

A question was also raised in relation to pelagic trawling of anchovies and what would occur should fishing nets accidentally encounter the seabed.

There are existing fisheries restrictions on bottom trawling. Bottom trawling and anchoring will be prohibited within the safety exclusion zone during the Operational Phase to avoid risks to fishing vessels and pipelines from snagged nets or anchors.

One organisation stated that they planned to monitor the situation with regard to impact on fisheries and would share their findings with South Stream Transport as they want to ensure that if there are impacts, South Stream Transport addresses these effectively.

South Stream Transport confirmed that its Community Liaison Officer and fishing experts will contact fishing organisations to discuss and agree the most appropriate way to monitor and compare fish catches.

### 3.9.5 Impact on Businesses

One comment made reference to the impact on vineyards; the owner of the Varvarovka horseriding business stated that his horseriding tour routes are impacted by the Project. He said they are a small business and wanted to know what could be done to resolve the situation.

The Draft ESIA Report, in Section 14.6.2.1 describes the removal of vineyards and states that the majority of this removal .

*"In total, approximately 11.8 ha of confirmed productive vineyards will be removed from productive use due to the Project...The majority (10.1 ha) of this removal will be temporary and limited to the duration of the construction works in the landfall section of the Project: a period likely to be for up to two years. Once construction is completed, it will be several years until mature, productive vineyards can be re-established on the land; however, during this time the replanting of vineyards will also require labour...the remaining 1.7 ha of currently productive land will be permanently lost due to road widening for the Varvarovka bypass road."*

With regard to the horse riding business in Varvarovka, at the time of writing the ESIA Report, the exact alignment of the routes used by the business was not clear. The assessment in the ESIA Report was based on the 'worst case' assumption that the horse riding tour routes would be completely severed during the Construction and Pre-Commissioning Phase (see **Chapter 14 Socio-Economics** Section 14.6.2.1). At the time of the ESIA Disclosure meetings, discussions with the affected business were ongoing to determine the extent of impact on the business. At the time of writing no compensation agreement has been reached with the owner of the horseriding business.

### **3.9.6 Community Investment**

A number of questions were asked regarding community investment. Specific suggestions made were for a playground, a kindergarten and a school in Rassvet. General comments asked to ensure that residents in local communities benefitted from the Project.

South Stream Transport has committed to a Community Investment Programme, and will work with local people and organisations to identify initiatives for investment. Although potential areas for Community Investment were not included in the assessment as covered by the ESIA Report, they may complement or build upon the mitigation measures committed to in the ESIA documentation, as well as existing programmes and initiatives in the Local Communities. Community Investment activities will be developed and implemented in consultation and partnership with the relevant stakeholders and will be co-ordinated with any ongoing Anapa Resort Town Municipal District or local Rural District Administration development programmes.

South Stream Transport has recently appointed a Community Liaison Officer, who is based in the Anapa area and who will be the focal point for facilitating liaison with the community on the Community Investment Programme. This will enable South Stream Transport to progress its intentions with respect to the Community Investment Programme.

### **3.9.7 Shipping Movements**

A comment was made in relation to potential impact on shipping movements to and from the Port of Novorossiysk.

The ESIA Report identified the main shipping routes that will interact with the Project's pipeline route and relevant information in relation to the route has been submitted to the Ministry of Transport and other relevant authorities. The Pipeline route is approved by a number of authorities including the Russian Ministry of Transport. The ESIA Report confirms South Stream Transport commitment that the route of the construction vessel spread, including the coordinates and timing of temporary exclusion zones, will be communicated to vessel operators through the route channels of the appropriate maritime authorities. Accordingly, Novorossiysk Port will know the location of the construction vessel spread and shipping traffic will be able to safely navigate around it at all times.

## **3.10 Community Health, Safety and Security**

### **3.10.1 Traffic – General**

A general comment was raised seeking clarification on whether drivers had received safety training.

Although construction activities generating significant traffic were not yet underway at the time of the ESIA disclosure meetings, SSTTBV has planned for training of drivers, including respecting all Russian driving rules and speed limits, 'well driven' principles training and monitoring of driver performance with further training delivered as needed. This was confirmed at the meeting and further information can be found in the ESIA Report **Chapter 15 Community Health, Safety and Security**.

All drivers of heavy vehicles associated with the Project are instructed to use the Gai-Kodzor and Varvarovka bypass roads and not to drive through the communities of Gai-Kodzor or Varvarovka. South Stream Transport will monitor to ensure that all Project related heavy vehicles use these bypass roads.

If residents observe a Project related heavy vehicles passing through Gai-Kodzor or Varvarovka they should inform the Project Community Liaison Officer providing details of the registration of the vehicle, the date and time, and the direction of travel so that corrective action can be taken.

### **3.10.2 Traffic - Rassvet**

Comments received were related to residents experiencing noise or vibration from construction vehicles throughout the day-time and night-time, dust being generated near to the kindergarten, complaints about dust and pollution, complaints about noise, complaints that action was not taken before construction commenced to address noise and dust impacts, requests to reduce the speed of vehicles, installation of cameras and to prevent construction vehicles from stopping near the kindergarten, vibration impacts, and damage to roads.

Other comments expressed dissatisfaction that mitigation measures were not in place or requests for mitigation measures, such as dust suppression through water bowsing, installation of speed restrictions and restrictions on where construction vehicles should stop.

South Stream Transport acknowledged at the community meetings that the town of Rassvet has recently been experiencing a relatively high level of traffic through its centre as increased levels of heavy vehicles have been passing through the town since construction of the Russkaya CS began. At the time of ESIA disclosure, as committed to in the ESIA Report **Chapter 15 Health, Safety and Security**, South Stream Transport was further assessing a range of mitigation measures in relation to Project traffic in Rassvet. For the purposes of this Addendum, an outline of the further assessment and a summary of the findings to date are provided in Section 3.10.2 of this Addendum Report.

## **3.11 Waste Management**

A comment asked how waste would be treated.

Details of waste management are described in **Chapter 18 Waste Management** of the Draft ESIA Report which also describes the available waste management facilities in the area.

A Waste Management Plan (WMP) will be drawn up by contractors and implemented to ensure waste is appropriately managed. The Management of Change Process will ensure any changes to the approach to waste management are assessed and environmental and social impacts are identified and addressed accordingly.

## **3.12 Unplanned Events**

Four comments were raised in relation to Unplanned Events. One comment queried whether the operation of the Pipeline could cause seismic tremors, while one comment sought clarification on what would happen should an earthquake occur in the Project Area. Two comments were raised

in relation to the protection measures in place and the potential consequences of sabotage from a terrorist incident.

The ESIA considered the likelihood of seismic activity along with other geohazards, including slope stability, coastal and fluvial erosion and flooding. Consideration of these issues is provided in **Chapter 4 Analysis of Alternatives, Chapter 5 Project Description, Chapter 19 Unplanned Events** and **Appendix 19.3 Terrestrial and Marine Geohazards** of the Draft ESIA Report. The route of the Pipeline was selected in consideration of these factors. The pipelines and landfall facilities were designed in compliance with national and internationally recognised standards. Regular monitoring and inspection of the Pipeline will be undertaken throughout the Operational Phase. This will enable any changes to the local environment, particularly those relating to seismic and geomorphological processes, to be identified. In addition, the landfall facilities will be secured with fencing, alarms and video monitoring to protect against third party interference.

In the unlikely event of rupture of one of the Project pipelines, the ESD system will be triggered and the pipelines will isolate themselves. The gas volume in the pipelines will then be automatically isolated from the landfall facilities, by closing the landfall facilities inlet and outlet ESD valves, thereby stopping the flow of gas to the pipelines.

South Stream Transport undertook an Emergency Threat Analysis (refer to ESIA Report Section 19.2) that determined the risks posed by potential emergencies and the need for an Emergency Preparedness and Response Plan and related procedures as a contingency for emergency events.

South Stream Transport will prepare an overarching Emergency Preparedness and Response Plan. This plan will define response actions for material unplanned events and risks identified by the Emergency Threat Analysis. Section 19.5 of the ESIA Report outlines the content of the Plan.

The ESIA Report also provides further details how the Emergency Preparedness and Response Plan will be integrated with local authorities to minimise risks associated with unplanned events and emergencies.

### **3.13 Cumulative Impacts**

Comments were made in relation to cumulative impacts associated with the Project together with the Russkaya compressor station and are addressed in this section. Comments made specifically only in relation to the Russkaya Compressor Station are addressed in Section 4 of this Addendum Report.

#### **3.13.1 Noise and Vibration**

The combined impact from the Russkaya CS and the Project was also considered by South Stream Transport and information can be found in the ESIA Report **Chapter 20 Cumulative Impact Assessment** where it was concluded that the combined noise impact of the Project and the Russkaya CS during the Operational Phase noise is assessed as Not Significant. In the nearest residential area to the Russkaya CS noise levels will not exceed the national limits.



### 3.13.2 Reptiles, Snakes and Birds

One comment stated that there had been a reduction in the number of birds in the Rassvet area during the last 8 months due to traffic related impacts.

Regarding impacts on reptiles, snakes and birds, a comprehensive terrestrial ecology study has been undertaken by the Project and is provided within **Chapter 11 Terrestrial Ecology** and **Appendices 11.1 to 11.3** of the ESIA Report.

The ecology study identifies that a large part of the area within which the Project will take place comprises rural agricultural land. There are reptiles, including tortoises, in the area which are being monitored. Tunnels will be constructed under the access road, so that the tortoise habitat will not be fragmented (see Section).

Regarding birds, numbers will vary depending on season, climate and of course on any localised and temporary disturbance work. Bird surveys have been conducted and the effect of the Project has been assessed. Impacts are not considered to be significant, especially since much of the disturbance is temporary and cleared areas will be restored once construction is complete. Regarding insects, there will also be seasonal patterns in population numbers. Again, significant impacts are not expected, especially as the majority of sensitive plants (e.g. junipers) being removed will be replaced (see Section 3.7.4).

The Project, along with Gazprom Invest, have committed to undertaking monitoring work to check the situation now and in the future, and to take measures to assist the environment to recover from the Project impacts.

### 3.13.3 Traffic on Public Roads

Two comments related to traffic in Gai-Kodzor associated with construction of the Russkaya compressor station. Comments were also received with regard to impacts from traffic passing through Rassvet - these comments and associated responses are provided in **Section 3.10 Socio-Economics** and **3.11 Community Health, Safety and Security**.

South Stream Transport understands there is an agreement between Gazprom and the Krasnodar Krai Administration for the use and maintenance of the public road system by vehicles associated with the construction of the South Stream Pipeline in Krasnodar Krai. According to this agreement, the public road between Rassvet and Gai-Kodzor will be maintained during construction of both the Russkaya compressor station and the South Stream Offshore Pipeline and after construction of both of these projects has finished, the road will be restored to its previous condition.

Regarding the impact of construction vehicles travelling through Gai-Kodzor, drivers of all heavy vehicles associated with both the compressor station and the Project have been, and will be, instructed to use the Gai-Kodzor bypass and not to travel through Gai-Kodzor. South Stream Transport will monitor throughout the Construction Phase to ensure that heavy vehicles use the Gai Kodzor bypass. If residents observe heavy vehicles related to the compressor station or the Project passing through Gai-Kodzor they should inform the Community Liaison Officer providing details of the registration of the vehicle, the date and time, and the direction of travel so that corrective action can be taken.

### **3.13.4 Community Health, Safety and Security**

One comment related to the behaviour of construction workers from the Russkaya CS including a concern regarding littering in the streets.

With regard to the behaviour of construction workers, **Chapter 15 Community Health, Safety and Security** of the ESIA Report discusses the potential impact caused by the presence of construction workers and commits to a monitoring programme that will record any issues of poor conduct by the Project's workforce (including contractors and sub-contractors) in Local Communities. This will include monitoring the number of grievances raised by local residents via the Grievance Procedure relating to the workforce and its interaction with the community, and applying corrective actions.

During the meeting it was emphasised that if residents observe workers from the Russkaya Compressor Station or the Project littering when they are in the Local Communities they are requested to inform the Community Liaison Officer so that corrective action can be taken.

## **3.14 Environmental and Social Management System**

Additional information was requested on how construction management plans will be incorporated into construction contracts. Compliance with South Stream Transport's Environmental and Social Management Plan (ESMP) is included as a Project requirement in contractual documentation between South Stream Transport and its main construction contractors. The ESMP will form the basis for subsequent, more detailed management plans to be prepared and implemented by construction and operations contractors who will be contractually obliged to comply with the relevant environmental and social requirements, specifications, and procedures set out in South Stream Transport's ESMP.

## **3.15 Other Issues**

### **3.15.1 Local Gas Supply**

As Varvarovka and Sukko do not yet benefit from local gas supply, fourteen comments were made requesting information regarding the supply of gas for domestic purposes. The matter of local provision of gas lies outside the scope of the Project however, because it is a question of major interest to the residents in these communities and was raised during the scoping meetings held in late 2012 as part of the ESIA process, South Stream Transport invited representatives of companies responsible for local gas distribution to attend the Varvarovka community meeting on 23 July 2014 to discuss the issue with local residents. Companies represented were Gazprom Company, Gazprom Transgaz Krasnodar, Gazprom Gazoraspredelenie Krasnodar and Anapa Gorgaz. The representatives confirmed the existence of a plan for local gas supply in the communities of Varvarovka and Sukko and that implementation and delivery should start from 2015 to 2017.

### 3.15.2 Miscellaneous

A question was directed to the representatives regarding the expertise the team has of similar projects and what were the differences between the Project and the Nord Stream offshore pipeline project. It was explained that whilst there are similarities between the type of Project and the specialist contractors used will have experience gained from Nord Stream, the two projects have different geographies and requirements, meaning the engineering and designs of the Project will be different.

One comment claimed degradation of the State Nature Reserve "Utrish" had occurred in the last ten years, Utrish Nature Reserve. The ecological and visual assessments undertaken as part of the ESIA included consideration of potential impacts on Utrish nature reserve, particularly the habitats and species contained within the area. The Utrish Special Protected Natural Area (SPNA) is located approximately 3.8 km southeast of the Pipeline construction corridor and is described in **Chapter 11 Terrestrial Ecology Section 11.5.1.1** of the ESIA Report. Due to the distance between the SPNA and the construction activities, no significant impacts were identified. Consultation took place with the Director of the Nature Reserve in April 2013 and subsequent visits made. No concern was raised in relation to potential impact on the Nature Reserve.

## 4 Additional Information on Russkaya Compressor Station

In response to information requests received during the consultation period for the ESIA, the following sub-sections supplement **Appendix 20.1 - Environmental and Social Impacts of Associated Facilities: Russkaya Compressor Station** of the ESIA Report or provide responses given by the representative from Gazprom Invest to specific questions asked at the disclosure meetings for the South Stream Transport draft ESIA Report.

### 4.1.1 Land Acquisition

Information were requested about the number of people affected by land acquisition for the Russkaya compressor station (CS) and related infrastructure. Information was also sought on any related issues, including compensation measures, if relevant.

According to information in the Russkaya CS EIA, land was acquired on short-term and long-term leases from eight land owners for construction of the CS, including private companies and the Anapa Resort Town administration. The land acquired comprised a mix of forested land, meadows and arable or agricultural land.

According to the Russkaya CS EIA, losses and damages to agriculture and forestry associated with land acquisition will be compensated in full accordance with Russian law; some land will be reinstated and returned to the land users in a condition suitable for agriculture. Thus, it is understood that all losses (by land owners and land users) were compensated in full accordance with relevant legal requirements.

The Russkaya CS EIA further confirms that the costs of compensation were included in the consolidated estimates for the construction; and gives an estimate of the cost of damages for each land owner. It confirms that the costs included costs of damages and lost profits of agricultural production, taking into account within the definition of damages various matters including *"loss of profits suffered by owners, tenant farmers, landowners and tenants of land seizure or temporary occupation of land rights, land owners, land managers, landowners and lessees of land plots of agricultural production, the cost of biological re-cultivation"*. It also confirms that this information was submitted to the relevant agency.

### 4.1.2 Power and Boiler Plant

Appendix 20.1 of the ESIA Report summarises information about plant relevant to air quality impacts as presented in the Russkaya CS EIA. One request received during the ESIA consultation process sought further information on the magnitude of emissions from Russkaya CS power plant and boiler plant in comparison to other Russkaya CS plant, e.g. gas pumping assemblies.

Once operational, the Russkaya CS will include fourteen gas pumping assemblies (ten for standard operations and four reserves), with the gas turbines having a unit capacity of 32 megawatts (MW). The base load of the gas turbines during operation would be 320 MW. The impact of these sources on annual mean NO<sub>2</sub> concentrations have been quantified in Appendix 20.1 of the ESIA Report.

The seven reciprocating gas engines at the Russkaya CS have a unit capacity of 1.5 MW for power supply (five for standard operations and two reserves). The operational capacity of these units is therefore 7.5 MW. The capacity of the four Vitoplex 200 natural gas fired boilers (three for standard operations and one reserve) would be no more than 1.9 MW per unit.

The thermal capacity of the Russkaya CS gas pumping assemblies would therefore be about 25 times greater than the combined capacity of the gas engines and boilers providing power and heat to the Russkaya CS complex. Thus, as described in Appendix 20.1, the gas turbines are the main source of NO<sub>x</sub> emissions at the CS, and other smaller sources would be unlikely to significantly change the magnitude of predicted impacts on annual mean NO<sub>2</sub> concentrations at air quality sensitive receptors.

#### **4.1.3 Air Quality**

One information request received during the ESIA consultation process sought confirmation about the locations of communities that might be impacted by air quality issues due to the Russkaya CS. It was suggested that the short term effects of NO<sub>2</sub> emissions from the CS should be analysed using the same methodology as applied to the Project.

Monitoring of NO<sub>2</sub> undertaken for the Project ESIA in 2012 and in 2014 indicated that long-term baseline concentrations away from major sources of road traffic were typically less than 10 µg/m<sup>3</sup>, well below the annual mean Project standard of 40 µg/m<sup>3</sup>. Air quality monitoring conducted in 2014 included locations in Gai-Kodzor and in Rassvet that are subject to higher levels of road traffic than typically occurs in the local area, and here the long-term concentration was around 20 µg/m<sup>3</sup>.

The short-term baseline NO<sub>2</sub> concentration used by the Russkaya CS EIA represents 25% of the 20-minute Project standard at Gai-Kodzor. The same baseline concentration is also assumed to apply to the other nearby residential settlements (viz. Buzhor, Zelenaya Roshcha, and Varvarovka). Baseline concentrations of CO, the other pollutant emitted by natural gas fired plant, are 36% Project standard.

The Russkaya CS EIA reported that the largest change in short term 20-minute concentrations would occur at Gai-Kodzor, while other residential areas would be less affected, due mainly to their greater distance from the source of emissions. Gai-Kodzor can also be considered to be a location which is affected by road traffic emissions to a greater extent than other more rural locations.

A summary assessment of the short term impacts on NO<sub>2</sub> reported in the Russkaya CS EIA, using the ESIA impact assessment methodology, is presented in the Table 4.1 and Table 4.2 below. It is South Stream Transport's understanding that the Russkaya EIA air quality assessment included the CS power plant, heating plant and other emission sources in the calculation of short term NO<sub>2</sub> concentrations.

**Table 4.1 Russkaya Compressor Station EIA Impact on Short Term NO<sub>2</sub> Concentrations – Construction**

Receptor	Baseline Conc. % PS	Receptor Sensitivity	Impact % PS*	Impact Magnitude	Predicted Conc. % PS*	Significance
Gai-Kodzor	25%	Low	4%	Negligible	29%	Not Significant
Buzhor	25%	Low	2%	Negligible	27%	Not Significant
Zelena Roshcha	25%	Low	1%	Negligible	26%	Not Significant
Varvarovka	25%	Low	1%	Negligible	26%	Not Significant

\* PS = Project Standard

**Table 4.2 Russkaya Compressor Station EIA Impact on Short Term NO<sub>2</sub> Concentrations – Full Operation**

Receptor	Baseline Conc. % PS	Receptor Sensitivity	Impact % PS*	Impact Magnitude	Predicted Conc. % PS*	Significance
Gai-Kodzor	25%	Low	34%	Moderate	59%	Low
Buzhor	25%	Low	22%	Low	47%	Low
Zelena Roshcha	25%	Low	17%	Low	42%	Low
Varvarovka	25%	Low	13%	Low	38%	Low

\* PS = Project Standard

The Russkaya CS EIA provides estimates of short term impacts for a range of pollutants during construction, including NO<sub>2</sub>, NO<sub>x</sub>, SO<sub>x</sub> and CO. Table 6.2 in the Russkaya CS EIA shows that the predicted concentration during construction at Gai-Kodzor is a factor of 0.29 of the Project standard for short term NO<sub>2</sub> (an increase of 4% of the standard, or 8 µg/m<sup>3</sup>). The predicted CO concentration is a factor of 0.36 of the standard for CO (no change), and less than 0.05 for all other pollutants. The maximum short term concentration is therefore 36% of a pollutant limit.

During operation of the CS, the compressor station is predicted to generate a maximum short term concentration for NO<sub>2</sub> of 59% of the Project standard at Gai-Kodzor, which would equate to approximately 118 µg/m<sup>3</sup>. The impact on other pollutants is less than this. The operational phase is therefore predicted by the Russkaya CS EIA to lead to a change of 34% of the Project standard, and the limit is not predicted to be exceeded.



Applying the impact assessment methodology in the ESIA to the predicted short term impact at Gai-Kodzor, for the construction stage, NO<sub>2</sub> is predicted to increase by 4% of the limit. This is considered a negligible magnitude of change. A negligible change is also predicted for all other pollutants. The residents at Gai-Kodzor and other residential locations are considered to be of low sensitivity for NO<sub>2</sub>, according to the descriptions provided in Table 9.13 of the ESIA Report. The sensitivity for all other pollutants is negligible because the baseline conditions constitute less than 15% of the limit. The predicted impact (using Table 9.15 from the ESIA) is therefore Not Significant for all receptors.

Applying the impact assessment methodology in the ESIA to the predicted short term impact at Gai-Kodzor, for the operational stage, NO<sub>2</sub> is predicted to increase by 34% of the limit. This is considered a moderate magnitude of change at a receptor of low sensitivity, giving an overall impact (using Table 9.15 from the ESIA) of Low significance<sup>4</sup>. A negligible change is predicted for all other pollutants.

In addition to the four closest residential areas, the Russkaya CS EIA also calculated concentrations at eight locations in very close proximity to the Russkaya CS and it is these locations where exceedances have been predicted. These locations are selected points in very close proximity to the CS facility, and not locations at the edge of or within the Sanitary Protection Zone (SPZ).

The Russkaya CS EIA analysis of the model states that based on the results of calculations, during joint operation of the planned facilities, pollutant concentrations on the edge of the mineral and sanitary protection zone do not exceed 80% of the Project Standards – the standard national limit value for territories with increased air protection requirements.

Clarification was requested as to whether the land uses surrounding the Russkaya compressor station may result in human exposure to short term impacts.

**Appendix 20.1** Section 4.3.1.2 (Operational Phase) of the ESIA Report states that: *‘The Russkaya CS EIA report predicted exceedances of the short-term NO<sub>2</sub> standard at ground level elsewhere close to the compressor station site, but this would not occur at locations where there is residential exposure.’*

The short term NO<sub>2</sub> limits should apply to areas where people will be regularly present for the time period being assessed, which for NO<sub>2</sub> is 20 minutes. Other than local residents, there are no known land uses within this area that might give rise to the regular presence of the same individuals within this area for any length of time (such as recreational activities, tourist attractions, transport infrastructure or public services). It is therefore very unlikely that any theoretical short term exceedance of the Russian national MPC for NO<sub>2</sub> would coincide with a human presence.

It was also requested that further explanation be given to demonstrate that the residual air quality impacts on human receptors such as Gai-Kodzor will be of negligible significance after the implementation of mitigation measures.

**Appendix 20.1** Section 4.3.4.2 of the ESIA Report states:

*"Provided these mitigation measures are implemented in full, the impacts would be no more significant than as set out in the EIA, Chapter 9 of the ESIA and within this appendix".*

As described in **Appendix 20.1** of the ESIA Report and Section 4.4.1.2 of this Addendum, the residual air quality impacts to surrounding residents are considered to range from Not Significant to Low significance. Furthermore, the cumulative assessment was based on unfavourable meteorological conditions, and thus the analysis represented an improbable very worst case.

#### **4.1.4 Construction Workers**

Information was requested on the number of workers in accommodation camps, and on the conditions of worker accommodation including management of the workforce (working hours, rules governing worker's movements during non-working hours; transport arrangements for workers; regulations governing the use of alcohol; sexual transmitted disease testing; etc), details of local versus non-local workers and any possible impacts on community health, safety and security of local communities. Information was also requested on grievance mechanisms, if any, available to these workers. A question was also asked about whether temporary workers accommodation camps would be used during the operation of the Russkaya CS.

The Russkaya CS EIA does not provide information on the number of local versus non-local workers, the number of workers that would reside in the labour camp, management of the workforce, nor consideration of community health and safety impacts that might arise as a result of the presence of a non-local workforce.

In response to enquiries related to this issue, Gazprom Invest referred South Stream Transport to the Construction and Installation Works (CIW) contractor in order to obtain the information. South Stream Transport will liaise with Gazprom Invest and the CIW contractor to establish if the information can be provided. Furthermore, as indicated in Section 4.9.4.2 of **Appendix 20.1** of the ESIA Report South Stream Transport has committed to *"liaise with Gazprom Invest with the aim of developing a consistent (and where necessary reciprocal) approach to a Grievance Procedure, as far as practicable."*

Regarding future workers accommodation camps, a representative from the operator of the Russkaya CS (Gazprom Transgas-Krasnodar) present at the ESIA disclosure meeting in Varvarovka, confirmed that there will not be a workers accommodation camp during the Operational Phase of the Russkaya Compressor Station.

#### **4.1.5 Security**

Information was requested on the Russkaya CS security system approach, organisation and procedures.

The Russkaya CS EIA does not include information on security system approach, organisation and procedures (e.g. details such as monitoring and response activities; control of security personnel; grievance mechanism relating to security arrangements and acts of security personnel).

South Stream Transport has committed to liaise with Gazprom Invest with the aim of understanding their approach to security management practices and to develop a consistent approach to these as far as practicable.

#### 4.1.6 Noise and Vibration

Eight comments related to clarification requests regarding noise and vibration generated from operation of the Russkaya compressor station. It was asked whether the noise and vibration levels would be safe and whether noise would be audible from the local communities, including taking into consideration prevailing wind conditions. It was stated that some residents in Gai Kodzor were thinking of selling their home as they are worried about potential noise and vibration and the impact on quality of life.

The Gazprom Invest representative present at the meetings stated that when operational, the Russkaya CS will generate little to no noise or vibration. In addition, the Russkaya Compressor Station is located in a valley and is quite far from residential areas, which will further minimise the potential for any noise impacts on surrounding communities.

It was noted that there is likely to be some noise during the commissioning activities for the compressor station (such as venting) but due to the location of the compressor station in a valley and the distance from Gai Kodzor this impact will be limited and will be of a temporary nature occurring only for a short period of time.

The Gazprom Invest representative confirmed that noise and other emissions are already being monitored at the compressor station and will continue to be monitored during all operations of the Russkaya CS to ensure that the noise levels are not too high. The Russkaya CS is complying with very high national standards and will respect all emissions limits, including noise.

Further information on noise and vibration in relation to the Russkaya CS can be also be found in **Appendix 20.1: Environmental and Social Impacts of Associated Facilities: Russkaya Compressor Station (CS)** of the ESIA Report and in the EIA for the Russkaya CS which was undertaken to Russian legislative standards.

#### 4.1.7 Employment and Training

One comment made was in relation to employment generated from the operation of the compressor station.

The Gazprom Invest representative present at the meeting advised the questioner to attend the separate subsequent meeting in Varvarovka where representatives from the operator (Gazprom Transgas-Krasnodar) would be available to answer questions (see Section 2.2.3 above).

#### 4.1.8 Stakeholder Engagement

One questioner said they believed that no public meetings had been held prior to construction of the Russkaya compressor station and that it would be a good idea to hold these.

The Gazprom Invest representative at the meeting confirmed that in fact public consultation events had taken place in the Anapa area prior to construction of the Russkaya CS and offered to

share the dates and locations of the meetings. The meetings were part of the national EIA process.

#### **4.1.9 Community Investment**

A specific question was asked regarding the status of an application made by Rassvet residents to Gazprom Invest to fund the construction of a children's playground in the community. Gazprom Invest responded to confirm that the application was received and was currently going through a process of assessment and approval.

#### **4.1.10 Cultural Heritage**

Information was requested about the archaeological investigation carried out as part of the Russkaya CS EIA, while a comment expressed concern that archaeological sites were being destroyed.

During the meeting the representative from Gazprom Invest stated that they would be happy to discuss any queries relating to on-going construction directly with stakeholders. As part of South Stream Transport Interface management procedure with Gazprom Invest, South Stream Transport will continue coordinating on cultural heritage activities and will follow up on questions raised during the ESIA disclosure process. Further information on cultural heritage and the Russkaya CS can be found in the ESIA Report in **Chapter 20 Cumulative Impact Assessment** and **Appendix 20.1**.

#### **4.1.11 Waste Management**

Waste Management: one comment requested clarification on generated waste from the Russkaya CS, enquiring how waste would be treated.

At the moment in the GPI temporary work camp and also on the RCS site water is brought in from outside and there is a system for storing the water on site until it can be taken away. Similarly, hard waste (rubbish) is also stored and then taken out and offsite.

## 5 ESIA Report Errata

The ESIA Report stated that the following pre-mitigation impact significance to marine mammals during the Operation Phase of the Project would be of a **Moderate** significance, this should have stated **Low** significance. Section 12.5.3.2 of the ESIA Report states:

***“Marine Mammals***

*As with seabirds, vessel movements (including vessel noise) associated with Pipeline inspection and maintenance is a low magnitude impact of **Moderate** significance prior to mitigation.”*

The ESIA should have reported that the impact magnitude is considered to be negligible, in line with the methodology criteria used. The Operational Phase impact upon marine mammals is therefore reported as follows.

**Marine Mammals**

Pipeline inspection and maintenance will involve some limited vessel movements. The proposed maintenance schedule envisages annual inspections of critical pipeline sections. Vessel movements associated with maintenance activities are unlikely to be distinguishable from current presence and movements of vessels associated with for e.g. shipping and fishing, throughout the area. As such, and given the infrequent and short-term nature of these activities, the magnitude of the impact is assessed as negligible on a receptor of high sensitivity and of **Low** significance.

## 6 Summary

The ESIA Report for the South Stream Offshore Pipeline – Russian Sector was publicly disclosed from 9th July 2014 to 10<sup>th</sup> August 2014. This ESIA Addendum provides details of stakeholder engagement undertaken during consultation and disclosure of the ESIA Report, and includes information in response to comments, questions or requests received during that process. The Addendum also contains information on further studies or modelling undertaken that was not included in the draft ESIA Report. The majority of comments received during the ESIA disclosure period fell into four topic areas: Socio-economics, Community Health, Safety and Security, Project Description and Cumulative Impact Assessment, with key issues including construction traffic impacts on local communities, comments related to the Project design and construction schedule, impact on fisheries and queries related to the Russkaya CS.

A number of comments related to topics that are not within the remit of the ESIA Report. These included questions relating to the gasification of the local area and general statements of support or opposition. These have been included as “other issues” (Section 3.15) and although not directly responded to in this ESIA Addendum, responses were provided directly to stakeholders during the ESIA consultation meetings. For comments related to the Russkaya CS that were not responded to, South Stream Transport are committed to providing these questions directly to Gazprom Invest for response.

In terms of construction traffic, the majority of comments related to Rassvet; concerns were raised regarding safety, noise, vibration and air quality. Section 3.10.3 includes discussion of these issues and consideration of further mitigation measures based on the initial findings of the Rassvet Traffic Assessment. Clarification on traffic routes is given in Section 3.2.2 and construction timings are given in Section 3.2.3.

Clarification was requested at consultation meetings by fisheries who were concerned that the Project may affect fish stocks such as anchovies that are critical to their business. Further clarification is given in Section 3.2.4 and Section 3.10.4 of this ESIA Addendum. As stated in the ESIA Report, it is considered that the impact will be Not Significant. Comments related to the Russkaya CS included those on noise, traffic, employment, workers accommodation opportunities and archaeological excavations. Clarification is provided in Section 3.14, with additional information provided in Chapter 4 related to Land Acquisition (Section 4.1.1), Air Quality (Section 4.1.3), Construction Workers (Section 4.1.4) and Security (Section 4.1.5).

For all future major changes to the design or construction techniques as stated in the ESIA Report, a management of change process will be followed to ensure environmental and social impacts are identified and, if necessary, mitigated. The ESIA Report sets out the management of change process in Section 5.11 (**Chapter 5: Project Description**) and Section 22.5 (**Chapter 22 Environmental and Social Management**). South Stream Transport will provide regular updates on changes to the Project, their implications and Project actions to address potential impacts.



## Acronyms / Abbreviations

Abbreviation/Term	Description
%	Percent
BAP	Biodiversity Action Plan
BUCR	Back Up Control Room
CCR	Central Control Room
EEZ	Exclusive Economic Zone
EIA	Environmental Impact Assessment
ESIA	Environmental and Social Impact Assessment
ESMP	Environmental and Social Management Plan
ESMS	Environmental and Social Management System
GIIP	Good International Industry Practise
GPI	Gazprom Invest
HSSE-IMS	Health, Safety, Security and Environmental Integrated Management System
IFC	International Finance Corporation
km	Kilometres
kph	Kilometres per hour
m	Metres
m <sup>3</sup>	Cubic metres
NGO	Non-governmental organisations
NM	Nautical mile
NTS	Non-technical Summary
OSPAR	Oslo Paris Commission
PLONOR	Pose Little or No Risk to the Environment
PS	Project Standard

Abbreviation/Term	Description
RoW	Right of Way
SCADA	Supervisory Control and Data Acquisition
SCD	Stakeholder and Consultation Database
SEP	Stakeholder Engagement Plan
SPNA	Special Protected Natural Area
TBM	Tunnel Boring Machine
USB	Universal Serial Bus (a memory flash drive used for computer data storage)

# **Appendix 1 Stakeholder Comments Received during the ESIA Consultation Process**



**Table A.1 Stakeholder Comments Received during the ESIA Consultation Process**

Type of Stakeholder	Topic Area	Comment	Response provided in ESIA Addendum
<b>ESIA Disclosure Meeting – Gai-Kodzor 23<sup>rd</sup> July 2014</b>			
Local Resident	Stakeholder Engagement	There is too little media coverage from SSTTBV relating to the Project which has led to rumours being generated in local communities.	Section 3.3.1
Local Resident	Project Description	The Project will lead to closure of road from Gai-Kodzor to Sukko and relocation of residents in Gai-Kodzor.	Section 3.2.2
Local Resident	Unplanned Events	When gas is put into pipeline, it will cause seismic tremors.	Section 3.13
Local Resident	Cumulative Impact Assessment	Regarding compressor station (CS) concern about noise, air and vibration associated with traffic.	Section 3.10.3 Section 3.14.3
Local Resident	Socio-economics	Increased traffic through Gai-Kodzor.	Section 3.14.3
Local Resident	Cumulative Impact Assessment	For two hours, I was taking down number plates of GPI trucks and went to Head of Gai-Kodzor to raise - but received no feedback. Put road sign to entry of village saying no trucks. Main issue is that residents are concerned about the level of truck traffic on the road. Some feel that even if the SSTTBV and GPI trucks use the bypass there are still too many trucks passing. Concern that empty trucks from GPI are coming back from CS instead of taking the bypass road.	Section 3.14.3
Local Resident	Other Issues	Gasification of the country. When providing gas to the countries overseas we should not overlook our own citizens. In our region there are 52 small townships and none 100% gasified even though local gasification started in the 60s.	Section 3.16.1

Type of Stakeholder	Topic Area	Comment	Response provided in ESIA Addendum
Local Resident	Socio-economics	Project is here for long period of time and people working for the Project use our facilities e.g. schools, kindergartens and also our public transportation is full. Therefore, we would like the Project to consider building e.g. a sport stadium, gym, taking students by bus to Anapa.	Section 3.10.7
Local Resident	Cumulative Impact Assessment	Are there plans to build nearby a workers accommodation camp or any infrastructure surrounding the CS during operation?	Section 3.14.4
Local Resident	Cumulative Impact Assessment	During free time, workers are drinking and littering in the local community. We would like you to organise your workers more and keep them entertained in their spare time e.g. building sport facilities.	Section 3.14.4
Local Resident	Project Description	Can local people use the the old dirt road between Gai-Kodzor and Varvarovka? [location not identified]	Section 3.2.2
Local Resident	Socio-economics	In the NTS it is written that local jobs will provided and benefits for local business. However it also states that most jobs are specialised and will be taken by foreigners.	Section 3.10.1
Local Resident	Socio-economics	What about training for people locally so that they can find jobs	Section 3.10.1
Local Resident	Other Issues	I heard that our settlement is connect to electricity substation in Bouzhor settlement. Does that mean that we will enjoy better supply?	Section 3.16.4
Local Resident	Unplanned Events	Is there any protection from terrorist attacks?	Section 3.13
Local Resident	Cumulative Impact Assessment	Question on noise from GPI Russkaya CS.	Section 3.14.2



Type of Stakeholder	Topic Area	Comment	Response provided in ESIA Addendum
Local Resident	Cumulative Impact Assessment	I have heard there will be an office in Anapa for Gazprom-Transgas-Krasnodar (GTK). Will the CS create jobs during operation of the GPI Russkaya CS?	Section 3.14.6
Local Resident	Cumulative Impact Assessment	How will the CS impact on GK? E.g. vibration impact. Some people are thinking about selling their houses because they are worried about vibration and the quality of living. People are very worried about vibration.	Section 3.14.2
Local Resident	Cumulative Impact Assessment	Will there be any noise from the CS?	Section 3.14.2
Local Resident	Cumulative Impact Assessment	We have positive attitude towards the project but what we are worried about is vibration and noise.	Section 3.14.2
Local Resident	Unplanned Events	If there is an act of terrorism attack and the pipeline is blown up what consequences will this have?	Section 3.13
Local Resident	Unplanned Events	What happens in case of earthquake in project area?	Section 3.13
Local Resident	Other Issues	Do you have any previous experience/knowledge of a similar project to South Stream Offshore Pipeline which you could apply to your project? Is there a difference between South Stream Offshore Pipeline and Nord Stream?	Section 3.16.4
Local Resident	Cumulative Impact Assessment	Noise and vibration is a key issue and concern. Will there be noise from CS during operation.	Section 3.14.2
Local Resident	Terrestrial Ecology	We have environmental problems e.g. Utrish is not as it was before ten years ago.	Section 3.8.2

Type of Stakeholder	Topic Area	Comment	Response provided in ESIA Addendum
Local Resident	Waste Management	What about your waste and how you will treat your waste?	Section 3.12
Local Resident	Project Description	Why has the pipeline route direction been changed. I walk a lot and noticed that some forest had been cut down. I thought it was to do with the topography or ground conditions. We do not have so much forest around here.	Section 3.2.7
Local Resident	Socio-economics	Project must provide local jobs for people. High level specialists living here - my grandsons have been to university and I would like them to work on the project.	Section 3.10.1
<b><i>ESIA Disclosure Meeting – Sukko 23<sup>rd</sup> July 2014</i></b>			
Local business	Other Issues	The ESIA study I have looked at gives me ground not to have concerns.	Section 3.16.4
Local business	Project Description	Although the ESIA study gives me ground not to have concerns, it is difficult to predict and measure the impact the Project will have on the marine environment and fishing in one year's time. We hope fishermen will be able to continue using routes and fishing grounds they have used for hundreds of years. I would like to express hope that everything will be alright on this matter, in particular regarding anchovies. Thank you for all your work.	Section 3.2.4
Association of Fishermen of Krasnodar Krai	Project Description	Is any dredging of the seabed planned?	Section 3.2.6

Type of Stakeholder	Topic Area	Comment	Response provided in ESIA Addendum
Association of Fishermen of Krasnodar Krai	Project Description	When will construction take place? Will there be restrictions for vessels?	Section 3.2.4
Association of Fishermen of Krasnodar Krai	Other Issues	Two months ago, I requested bathymetry and coordinates of the pipeline route to SSTTBV and I did not get a response.	Section 3.16.4
Association of Fishermen of Krasnodar Krai	Project Description	My concern as a fishing company is that we are only allowed to catch anchovies and sprat during a certain part of the year when fish is available (e.g. for anchovies it is from October to March, during the high season) and the Anapa Bank, where you will be operating, is where we do the majority of our fishing. Therefore, we need to understand the timing of the project works so that it does not interfere with our fishing activities. If it interferes, we need to know the timing and the depth of where the pipeline will be laid.	Section 3.2.4
Association of Fishermen of Krasnodar Krai	Project Description	When will the construction start? Will it impact the high fishing season which is from October to March?	Section 3.2.3
Individual Entrepreneur Atanov (representing fishing companies)	Socio-economics	Has anyone from research institutes e.g. VNIRO or AzNIIRKH been involved in your research and is this information available to the public?	Section 3.10.5
Individual Entrepreneur Atanov (representing fishing companies)	Project Description	Anchovy fishing is 80% of the Krasnodar Krai fishing catch. The main wintering place and fishing place for anchovies is the Anapa Bank. If there is a serious impact or decline in anchovy numbers, this will result in many fishing companies suffering. Please limit your works during the autumn and winter period.	Section 3.2.4

Type of Stakeholder	Topic Area	Comment	Response provided in ESIA Addendum
Individual Entrepreneur Atanov (representing fishing companies)	Socio-economics	<p>We are going to monitor the situation and are ready to collaborate with you regarding providing you information.</p> <p>If fishing is impacted, we want South Stream Transport to find a solution for this. We can invite your specialists, including scientists, onto our boats and we can clarify with them the characteristics of fishing in the area and the relevant Russian fishing regulations.</p>	Section 3.10.5
Individual Entrepreneur Atanov (representing fishing companies)	Other Issues	We can provide experts to your project and likewise, your experts can cooperate with us.	Section 3.16.4
Individual Entrepreneur Atanov (representing fishing companies)	Socio-economics	We need reassurance that the project will not impact on anchovy stocks as we rely upon this for food and our livelihoods.	Section 3.10.5
Individual Entrepreneur Atanov (representing fishing companies)	Other Issues	Why are there no science people here? Where are the experts?	Section 3.16.4
Association of Fishermen of Krasnodar Krai	Project Description	How much will the fishing area be reduced by during operation?	Section 3.2.4
Individual Entrepreneur Atanov (representing fishing companies)	Project Description	We catch anchovies with pelagic trawling but in certain cases, where we take a bad turn, it can result in bottom trawling. If this happens, what will happen and is this allowed?	Section 3.2.4

Type of Stakeholder	Topic Area	Comment	Response provided in ESIA Addendum
Association of Fishermen of Krasnodar Krai	Other Issues	We will look at your information and if we have questions, we will put a request to you in writing.	Section 3.16.4
Individual Entrepreneur Kamshilov (Varvarovka Horse Riding Company)	Socio-economics	We have horse-riding routes which cross the pipeline (so we cannot use these routes anymore). We are a small company but we still need to continue our business. What can you do to resolve this situation?	Section 3.10.6
Novorossiyskiy Sea Commercial Port	Socio-economics	There are many shipping movements coming from and to our port. We will study your material, formulate our questions in respect to ship movements and come to you with detailed questions. You mentioned updating navigation charts with the pipeline coordinates and want to be sure that this will not impact our shipping navigation routes.	Section 3.10.8
Novorossiyskiy Sea Commercial Port	Project Description	Are bottom and surface activities occurring at the same time during pipe-laying?	Section 3.2.3
<b><i>ESIA Disclosure Meeting – Varvarovka 23rd July 2014</i></b>			
Local Resident	Socio-economics	The asphalt road under construction is directly adjacent to our household and our windows are very close to it. Will there be a path for pedestrians running alongside the road. Will there be a pedestrian crossing so that we and our children can cross safely.	Section 3.10.3
Local Resident	Cumulative Impact Assessment	We live in Anapa and it is a very nice place. There will be a large and powerful CS not far from us. Will there be any noise and vibration from the operation of the compressor station to people living nearby in Gai-Kodzor, Varvarovka and Rassvet, and how safe will these noise and vibration levels be? Are there standards/parameters to comply with? How high will the pressure be and will there be machinery operating there?	Section 3.14.2

Type of Stakeholder	Topic Area	Comment	Response provided in ESIA Addendum
Southern Branch of Institute of Oceanology of the Russian Academy of Sciences	Socio-economics	Will there be any noise protection screens?	Section 3.10.3
Local Resident	Soils, Groundwater and Surface Water; Terrestrial Ecology; Stakeholder Engagement	<p>1) I have lived here since 1998. Our street is the closest to the project and last Saturday night, construction was already under way and machines were excavating and stockpiling tonnes of material from the ground and generating noise. There were also search lights in the construction area. It was a nightmare.</p> <p>2) There is now a mound of material near my property (I live on the outskirts of the village towards Anapa at the bottom of a slope near two waterways) and I am concerned that when the heavy rains come in July and August, a landslide could occur, which has happened in the past. In 1983, there was a hurricane that nearly washed us into the sea. The town was flooded. Can you give us a guarantee that if there is a rainstorm, we will not be washed out into the Black Sea? The mound is getting bigger and bigger and we are very worried as it is dangerous. We have been asking you every week to remove it. Please could you come to see it and remove the material within three months. Let us die in peace, we do not want to be killed by pipes. We want our grandchildren to live in a flourishing country.</p> <p>3) Please also inform us before you carry out construction works near our houses.</p> <p>4) With regard to ecology, you said that you will restore everything. Please restore the grass cover, shrubs and trees.</p>	<p>Section 3.5.2</p> <p>Section 3.8</p> <p>Section 3.3.4</p>

Type of Stakeholder	Topic Area	Comment	Response provided in ESIA Addendum
Local Resident	Analysis of Alternatives	I am a pensioner. Your project is very scary. We do not believe you as what could happen is unpredictable. We do not know what might happen. Can you change the pipeline route, bypass the Black Sea and avoid our resorts and children's camps? The environment should be kept intact, which is what we have been fighting for since 1988. Something dangerous could happen.	Section 3.1
Local Resident	Other Issues	We are using firewood, when will we have gas?	Section 3.16.1
Community Council in Supsekh	Other Issues	At what stage is this gasification project?	Section 3.16.1
Local Resident	Other Issues	Can you put the project on hold? My name is Nikolai and I live in Sukko. You are making money and our business suffers.	Section 3.16.4
Local Resident	Other Issues	We have nothing to do with South Stream international project. Is it a promise that you will provide us with the gas supply?	Section 3.16.1
Local Resident	Other Issues	We are older than 70 and we still need to heat our houses with wood.	Section 3.16.1
Local Resident	Other Issues	We are tired of your lies and the level of trust. We get sick every winter because it is cold and there is no gas to keep us warm so we must use firewood. In 2015, you said that we will have gas.	Section 3.16.1
Local Resident	Other Issues	Most of our residents are pensioners and disabled persons so we need to know how much it will cost to bring gas to our houses. Is there someone from the administration who can tell us? We might need to borrow loans from banks to pay for the connection and we will pay interest. We are tired of using firewood.	Section 3.16.1



Type of Stakeholder	Topic Area	Comment	Response provided in ESIA Addendum
Representative of Green Russia	Other Issues	I am representing Green Russia. We visited all the facilities and sites up to Varvarovka, and we will provide you with our contact details (environmentalists, ornithologists and other specialists). We have a lot of criticisms and complaints regarding South Stream. We will engage with the local population. We will address and respond to all the complaints received.	Section 3.16.3
Community Council in Supsekh	Project Description	We have had meetings with representatives of the South Stream Project many times. Many of our comments have been addressed. However, we would still like to know more about the schedule of works, in particular, we are interested in the works you are conducting during the night-time. When will the onshore and offshore gas pipeline works that are disturbing the local community be completed? When will you finish the road works? When will you stop using the roads, which are being put under stress? Heavy-duty trucks are destroying the roads and they should not be.	Section 3.2.3
Community Council in Supsekh	Project Description	Will local roads be used by heavy trucks?	Section 3.2.2
Children's Camp Energetik (Sukko)	Stakeholder Engagement	I live and work in Sukko and appreciate these public hearings. We need to combine efforts and stay in close communication. We need to exchange information more often to bring about changes and corrections to design, which local people are currently not aware about. Already, a lot is happening which we have not been informed about. It is sad that there have been no public hearings on the construction of the CS as we do not know much about its performance. It would be good to minimise potential impacts. It would be good to have a public hearing about the CS.	Section 3.14.1

Type of Stakeholder	Topic Area	Comment	Response provided in ESIA Addendum
Southern Branch of Institute of Oceanology of the Russian Academy of Sciences	Marine Ecology Waste Management	I have been involved in the environment since 1980, about the time they started construction here, and have specific environmental knowledge and expertise. Major projects have passed through here which I have studied and local people are scared about the impacts of these projects, sometimes due to misunderstandings they have. For example, when you lay a pipeline, people perceive the possibility a gas leak / risk of fire and think that people on the shoreline could die from lack of oxygen. Projects are prepared by specialists with the relevant competencies and most normal citizens get lost in the documentation. I took a brief look at one of the volumes and my conclusion is that the project has addressed sensitive issues. However, in some sections regarding the environment, information is sparse and it is difficult to use the data and make a conclusion. For example, regarding pollution in the Black Sea (which is an issue) there is not enough baseline or information on monitoring. However, the study has been undertaken by good experts and the project will provide socio-economic benefits to the local communities.	Section 3.9 Section 3.13
Local Resident	Socio-Economics	Varvarovka is not a resort town, so the issue of employment and creating of new jobs is important here. Can we expect jobs from the project during operations? Which specialists might be required? Will we benefit from such a major project?	Section 3.10.1 Section 3.10.7
Local Resident	Other Issues	Can you get a grader and go along our roads?	Section 3.16.4
<b><i>ESIA Disclosure Meeting – Rassvet 24<sup>th</sup> July 2014</i></b>			
Local Resident	Socio-economics	When will a bypass road be built? Put yourself in our position. Due to noise and dust, there is no air to breathe. The road is our only request.	Section 3.10.2
Local Resident	Socio-economics	There is so much traffic, it is like an earthquake every night.	Section 3.10.2

Type of Stakeholder	Topic Area	Comment	Response provided in ESIA Addendum
Local Resident	Community Health, Safety and Security	Are you undertaking traffic safety training and providing inductions to drivers?	Section 3.11.1
Local Resident	Other Issues	Why are there no representatives from the local Administration present?	Section 3.16.4
Local Resident	Socio-economics	Since the heavy traffic began, cracks have appeared in our house. We cannot open our windows due to the dust and air pollution being so strong. You can come and see the layer of dust in our house. Passing vehicles (200 trucks per day) generate small earthquakes, in particular at night-time. There are 8-10 vehicles that travel along the road generating constant noise. We are grateful for the project bringing jobs but our only one request, is to build a bypass road. You inform us that it was the Administration who said the bypass road construction is not possible but they inform us that you have refused to build it. If you cannot build a bypass road, you need to build a bridge. GPI are constructing such a large project, it should not cost GPI much to build a bridge. The residents of Gai-Kodzor blocked the road and a bypass road was built. And we can also do this [block the road in Rassvet]. We have only one concern and that is a bypass road.	Section 3.10.2
Local Resident	Community Health, Safety and Security	We are concerned about the proximity of the kindergarten near the road that generates air, noise and dust pollution.	Section 3.11.2
Local Resident	Other Issues	Concerning gasification, when the CS project was launched, the media wrote that local communities would be able to receive gas from the gas supply system and that a road would be built upon the completion of the construction works as compensation for the construction disturbance. Will the promise be met and when?	Section 3.16.1
Local Resident	Project Description	Will the pipeline be laid onshore or on the seabed? From Temryuk or from another location? Will the gas pipeline pass through the community?	Section 3.2.1

Type of Stakeholder	Topic Area	Comment	Response provided in ESIA Addendum
Local Resident	Terrestrial Ecology	Your report states that there will not be much noise or dust and that the impact on the environment will be low. However, there have been impacts on the environment already such as on reptiles and snakes. The ecology has changed and we do not see birds anymore as they have been leaving this location over the past 8 months. As there are less birds, there are now more insects and snakes, which the birds would have otherwise eaten. This is a sign that the environment has been going through adverse changes.	Section 3.8.3
Local Resident	Socio-economics; Community Health, Safety and Security	Concerning traffic, we want you to ensure that we have good basic living conditions. The report states that vehicles will be covered with a tarpaulin and that the road will be sprinkled with water to reduce dust but none of these measures are being implemented.	Section 3.10.2 Section 3.11.2
Rassvet Cultural Centre	Socio-economics	This is a question to GPI. You promised to build a playground, when will it be built?	Section 3.10.7
Rassvet Cultural Centre	Socio-economics	The trucks should use the road located behind Rassvet. You must not put the health of people at risk. Why was this issue addressed in Gai-Kodzor, while there is no solution in Rassvet? We support the SSTTBV project, but the situation cannot be tolerated any no longer.	Section 3.10.3
Head of Education	Socio-economics	When will you be able to respond to this question [about the construction of a bypass road]? You should have called a meeting with us the people, not the Administration, before making a decision to allow trucks to use our road. We could make a referendum.	Section 3.10.3
Local Resident	Socio-economics	As far as I know, you brought in your own drivers to use for the project. Why don't you hire locals? We have professional drivers. Can we also get a job?	Section 3.10.1

Type of Stakeholder	Topic Area	Comment	Response provided in ESIA Addendum
Local Resident	Community Health, Safety and Security	Given that the road is so close to the kindergarten, children are impacted by passing vehicles generating noise and dust. Children play between 9 – 11 am and after 4 pm and from the traffic, they become covered in dust. The drivers also make stops near the kindergarten very often and this generates a lot of dust. Suggest that your trucks stop further away from kindergarten.	Section 3.11.2
Local Resident	Socio-economics	Will there be any infrastructure improvements following the completion of the South Stream Project?	Section 3.10.7
Local Resident	Socio-economics	We need a bypass road and a kindergarten.	Section 3.10.2
Local Resident	Other Issues	I would like to address a question to [name omitted]. Where do you come from? Do you live in a small village with a population of no more than 1000 people? Do you have playgrounds and a school? Please put your hand on your heart and tell us what the people in your community would do in our position.	Section 3.16.4
Local Resident	Socio-economics	If I am correct, you are not interested in building a bypass road in Rassvet because the land has already been sold and it is very expensive. However, you can buy the land back, otherwise we will block the road.	Section 3.10.2.2
Local Resident	Socio-economics	You should also sprinkle the road with water several times a day to reduce dust.	Section 3.10.2
Local Resident	Community Health, Safety and Security	The project should install video cameras along the road.	Section 3.11.2

Type of Stakeholder	Topic Area	Comment	Response provided in ESIA Addendum
<i>ESIA Disclosure Meeting – Anapa 24th July 2014</i>			
Local Resident	Cumulative Impact Assessment	When the Compressor Station (CS) becomes operational and is working at full capacity, what will the noise levels be?	Section 3.14.1
Reserve Utrish	Cumulative Impact Assessment	People are wondering whether wind will carry the noise from the CS e.g. a southerly wind will carry the noise to Gai-Kodzor and a northerly wind will carry noise to Sukko.	Section 3.14.1
NGO Ekurs	Project Description	Will traffic go through Rassvet and Varvarovka? What construction traffic route will be used?	Section 3.2.2
Local Resident	Cumulative Impact Assessment	Part of the road between Rassvet and Gai-Kodzor used to be in very good condition but was destroyed during construction of the CS. Will there be compensation for the destruction of the public roads?	Section 3.14.3
Environmental watch on North Caucasus	Physical and Geophysical Environment	When reviewing the ESIA and list of surveys and data collected, I did not see any meteorological surveys or hydro-meteorological data, despite there being a significant amount of data accumulated on this over many years. I think this is a very important area and I would like to see the data that you have prepared on this. It is important because during the construction period, slopes could become unstable and when there is rain, there could be land slippage and erosion.	Section 3.4
Environmental watch on North Caucasus	Project Description	How will you remove the ground from the microtunnel?	Section 3.2.5

Type of Stakeholder	Topic Area	Comment	Response provided in ESIA Addendum
Environmental watch on North Caucasus	Project Description	I am mostly worried about the point where the microtunnels break through the seabed into the water. It is understood that the excavated spoil will be pumped back to the land but it will probably not be possible to remove the spoil when you are near the sea via the tunnel without causing spoil and sediment to spill into the sea. Could you tell me more specifically how many cubic metres of spoil will be discharged into the sea.	Section 3.2.5 Section 3.2.6
Environmental watch on North Caucasus	Stakeholder Engagement	The material you have has a lot of technical words and the ESIA is very difficult to understand. All this wording makes it complicated and confusing. Somewhere, there might have been a translation problem with the materials and you should take into account that we are Russian and we are not all English speakers.	Section 3.3.2
NGO Ekurs	Project Description	There is mention in the NTS that construction will start on 1 July 2014. Is this correct?	Section 3.2.3
NGO Ekurs	Terrestrial Ecology	How much forest will be destroyed?	Section 3.8.5
Reserve Utrish	Terrestrial Ecology	The main protected species are the Nikolski Tortoise and the Juniper. We work in environmental education and all our communication with people is based on the fact that these are red book species. If you are impacting these species, how can we explain this to the people we work with given their protected status? The local communities have lots of questions.	Section 3.8.4 Section 3.8.5
Reserve Utrish	Terrestrial Ecology	In the construction corridor, there are lots of junipers. Please explain where the junipers have been taken away to. The survival rate of junipers is very low, and they grow very slowly - just 1 m over 6 years. Is it too early to assess the survival rate of the junipers following relocation. Is it possible for us to participate in the monitoring of the junipers?	Section 3.8.5
Reserve Utrish	Terrestrial Ecology	How many tortoises have you relocated so far?	Section 3.8.4



Type of Stakeholder	Topic Area	Comment	Response provided in ESIA Addendum
Local Resident	Terrestrial Ecology	Will the reptile exclusion fences only be there during construction and will they be removed after construction?	Section 3.8.4
Local Resident	Project Description	What will happen to the road that goes between Sukko and Varvarovka?	Section 3.2.2
Reserve Utrish	Cumulative Impact Assessment	You made some archaeological diggings/excavation works near the CS; what happened to the objects that you excavated?	Section 3.14.7
Ecological-biological station "the Little Prince" (Anapa)	Project Description	We understand that the gas pipeline will be laid on the seabed. There are no similar projects. How will the state of the pipeline be monitored. Could the pipeline become damaged?	Section 3.2.8
Ecological-biological station "the Little Prince" (Anapa)	Stakeholder engagement	I understand you have collected lots of scientific material for research and that there will be more data collected as part of future monitoring. Will you publish these materials? It will be very interesting for us to see these materials as no-one has done any monitoring in this area for a long time.	Section 3.3.3
Ecological-biological station "the Little Prince" (Anapa)	Stakeholder engagement	Will future monitoring data be released to the public?	Section 3.3.3
NGO Ekurs	Marine Ecology	Will you conduct monitoring for marine species such as dolphins?	Section 3.9
NGO Ekurs	Socio-economics	What benefits will there be for the locals in respect to the Project.	Section 3.10.1 Section 3.10.7

Type of Stakeholder	Topic Area	Comment	Response provided in ESIA Addendum
NGO Ekurs	Other Issues	We were present at the public hearings two years ago and a key benefit for locals will be gas supply to the adjacent villages. What can you say about this?	Section 3.16.1
Environmental watch on North Caucasus	Terrestrial Ecology	We all know that for the Project to be realised, a large area was taken out of the Anapa Sanitary Protection Area for the Anapa Resort Town and the land provided in compensation was not of the same value. Regarding the KTK Project, they compensated negative impacts by buying three ambulances and also took the administrative officials to America. I request you to consider how you can protect the seashore.	Section 3.8.6
<b><i>Comment Forms - Rassvet</i></b>			
Local Resident	Community Health, Safety and Security	The construction of the South Stream project is needed but not if it impacts the health of Rassvet citizens. The project earns billions while we breathe truck emissions and are poisoned.	Section 3.11.2
Local Resident	Community Health, Safety and Security	Regarding traffic, we experience unbearable noise all day and night.	Section 3.11.2
Local Resident	Other Issues	You transport gas abroad, yet increase the prices of gas in Russia. The project should bring gas to the houses of pensioners for free. I would need to save money for nearly 100 years to bring gas to my house.	Section 3.16.1
Local Resident	Socio-economics	The project should ensure heavy traffic bypasses Rassvet. The federal road that currently goes through Rassvet must be transferred to the bypass road. <i>[Interpretation of this is that the stakeholder thinks the road going through Rassvet is a federal road. The stakeholder wants the bypass built which will then take the status of the federal road, therefore leaving the Rassvet road to be used only by locals leading to less traffic]</i>	Section 3.10.2

Type of Stakeholder	Topic Area	Comment	Response provided in ESIA Addendum
Local Resident	Socio-economics	Attitude to the project is positive if Rassvet residents benefit from the Project.	Section 3.10.7
Local Resident	Socio-economics	If this project is undertaken, it means that it is needed. However, it is impossible for us to live in such conditions e.g. passing traffic sends tremors through the ground like earthquakes and there is a lot of dust all day long. We cannot sleep at night due to unbearable noise from trucks 24 hours per day. In my house and kitchen, cracks have started to appear. Who will pay for these losses? I am concerned that by the time construction finishes, everything will fall down (i.e. her house, etc.). These are not conditions for normal living.	Section 3.10.3
Local Resident	Socio-economics	A bypass road was constructed in Gai-Kodzor - why can't a bypass road be made here too? The road was watered two or three times per summer and that is it. No-one cares about the air quality and the air we must breathe. A kindergarten is located here and the children are forced to breathe trucks emissions.	Section 3.10.3
Local Resident	Socio-economics	While the gas pipeline is under construction, we have asked many times for the project to make a playground for our children and their mothers but it has not been constructed.	Section 3.10.7
Local Resident	Community Health, Safety and Security	I think it is beneficial for you. The roads are damaged and there is dust all the time near the kindergarten. Children should not breathe such air.	Section 3.11.2
Local Resident	Community Health, Safety and Security	I am not against the project itself but I live in Rassvet on Kommunarov Street - the road that is used by trucks where dust and noise is generated. The road is damaged and we cannot go outside. I have 3-year-old daughter and I cannot let her go outside to the yard because of the constant dust. We have a kindergarten on this street - what air are the children breathing?	Section 3.11.2

Type of Stakeholder	Topic Area	Comment	Response provided in ESIA Addendum
Local Resident	Community Health, Safety and Security	Project should make a bypass road like in nearby Gai-Kodzor. People can't breathe - and if situation won't change we will also have no place to live since our houses are breaking, we have cracks at the walls. We can't have a rest from the noise even for a minute. The Head of the rural district gives no response to our queries.	Section 3.11.2
Local Resident	Socio-economics	We have no playground in our community to walk our children.	Section 3.10.7
Local Resident	Other issues	The project is needed for the country.	Section 3.16.2
Local Resident	Community Health, Safety and Security	It is preferable to reduce the speed of trucks and to stop trucks from stopping near the kindergarten in Rassvet (kindergarten "Klubnichka" #22).	Section 3.11.2
Local Resident	Socio-economics	All of us in our community need a school and a new kindergarten for 200 places so that our children have somewhere to go.	Section 3.10.7
Local Resident	Socio-economics	Please repair all the roads in the community.	Section 3.14.4
Local Resident	Community Health, Safety and Security	I understand that the project is needed for our country, but it has generated a lot of problems in our community.	Section 3.11.3
Local Resident	Community Health, Safety and Security	Trucks are travelling at high speed. There is a lot of dust. The walls of the house are shaking like we are having an earthquake. The trucks are stopping just opposite the house near the kindergarten. We cannot bring children to the kindergarten in the morning because it is impossible to cross the road.	Section 3.11.2
Local Resident	Community Health, Safety and Security	The problem is that there is dust from the traffic and we cannot open the windows in our houses. At night it is impossible to sleep and all night long there is noise from traffic. The walls tremble.	Section 3.11.2

Type of Stakeholder	Topic Area	Comment	Response provided in ESIA Addendum
Local Resident	Other Issues	I am Russian, the country needs South Stream.	Section 3.16.2
Local Resident	Community Health, Safety and Security	It is difficult for the locals that live along Kommunarov Street in Rassvet. We have dust because of the trucks, they are destroying the roads, and no-one is repairing them.	Section 3.11.2
Local Resident	Socio-economics	As compensation for the dust and damage to our roads from project trucks, it would be good to build a playground for children in Rassvet. Children will tell you 'Thank You!'	Section 3.10.7
Local Resident	Other Issues	The project is needed for the country.	Section 3.16.2
Local Resident	Community Health, Safety and Security	The project should reduce dust and noise impacts, the trucks should not stop near the kindergarten and should not exceed the speed limit of 40 km per hour.	Section 3.11.2
Local Resident	Socio-economics	Roads in the community need to be repaired.	Section 3.14.3
Local Resident	Community Health, Safety and Security	This is a big request to you from Rassvet residents to prohibit trucks from stopping near kindergarten #22 "Klubnichka" on Kommunarov Street. Also, please reduce the speed of the trucks so that residents and children in the kindergarten do not breathe dust. Making an acoustic barrier would help reduce the noise. <i>[This comment was made not via the comment form but was just written on A4 paper and put in the comment box in Rassvet]</i>	Section 3.11.2
Local Resident	Community Health, Safety and Security	I think that this project is necessary for our country. However, as I live on the street that is used by trucks carrying heavy loads for construction, I really really do not like it [the project].	Section 3.11.2

Type of Stakeholder	Topic Area	Comment	Response provided in ESIA Addendum
Local Resident	Community Health, Safety and Security	<p>The project should urgently construct a bypass road that will not go through the communities. If you do not do this, all the residents living on Kommunarov Street in Rassvet will have:</p> <ol style="list-style-type: none"> <li>1. Asthma (unbearable dust for 24 hours)</li> <li>2. Deafness (noise day and night)</li> </ol>	Section 3.11.2
Local Resident	Community Health, Safety and Security Soils, Groundwater and Surface Water	<ol style="list-style-type: none"> <li>1. Road</li> <li>2. Kindergarten</li> <li>3. Community center</li> <li>4. River "Kotlama"</li> </ol>	<p>Section 3.11.2</p> <p>Section 3.5</p>
Local Resident	Other Issues	All Russian people need South Stream. I have positive attitudes towards the project.	Section 3.16.2
Local Resident	Community Health, Safety and Security	The project should limit the speed of the trucks, install 40 km sign. Wash dust from the road on a regular basis. Make an acoustic barrier as soon as possible.	Section 3.11.2
Local Resident	Socio-economics	My house is located on Kommunarov street that is used by trucks day and night. The distance between the house and the road is no more than 5 metres. The house vibrates from the vibrations, cracks are appearing and the foundation of the house is being destroyed. Who is going to be responsible for this?	Section 3.10.9
Local Resident	Other Issues	The gas pipeline is needed for the country.	Section 3.16.2
Local Resident	Socio-economics	The project should implement measures to minimise dust generated by trucks.	Section 3.10.2

Type of Stakeholder	Topic Area	Comment	Response provided in ESIA Addendum
Local Resident	Community Health, Safety and Security	The South Stream pipeline is a good thing, but before constructing it, you should have taken care of constructing roads, bridges, etc. and not making Rassvet residents angry regarding the trucks going through the community. Day and night we are suffering from dust, high levels of noise and what feels like an "earthquake" in our house.	Section 3.11.2
Local Resident	Community Health, Safety and Security	The project should not be transporting heavy loads through Rassvet community with trucks.	Section 3.11.2
Local Resident	Socio-economics	Generally I have positive attitudes towards this project, but only if you make a bypass road.	Section 3.10.2
Local Resident	Socio-economics	The trucks make a lot of dust. Please undertake some measures.	Section 3.10.2
Local Resident	Socio-economics	Make noise barriers, repair roads on a regular basis and wash dust from the asphalt road.	Section 3.10.2
Local Resident	Other Issues	This project is needed for the country.	Section 3.16.2
Local Resident	Socio-economics	We need a school in Rassvet, a kindergarten and to repair the roads in the community.	Section 3.10.7
Local Resident	Socio-economics	We need to have a GRP (gas distribution/ regulation station) in Yubileinyi microdistrict (so-called "Pole Chyudes") (part of Rassvet community that is not supplied with gas)	Section 3.16.1
Local Resident	Socio-economics	I have a positive attitude to the project as this project is needed for the country, but stop the noise made by the trucks.	Section 3.11.2



Type of Stakeholder	Topic Area	Comment	Response provided in ESIA Addendum
Local Resident	Socio-economics	The trucks should not go through Rassvet. The project should make a bypass road near Zarya Community.	Section 3.10.3
Local Resident	Socio-economics	We need a school and a kindergarten in Rassvet.	Section 3.10.7
Local Resident	Socio-economics	We need road repairs in Rassvet.	Section 3.10.2
Local Resident	Community Health, Safety and Security	The South Stream project is definitely needed for Russia. However, currently I cannot have a positive attitude towards it because the local people are suffering from it.	Section 3.11.2
Local Resident	Terrestrial Ecology	Unspoilt and pristine nature is suffering from the project.	Section 3.8.1
Local Resident	Socio-economics	The project should make a road for heavy trucks outside of the community.	Section 3.10.2
Local Resident	Other Issues	The project should give local people the opportunity to supply their houses with gas.	Section 3.16.1
Local Resident	Socio-economics	The project should supply schools, kindergartens and community centres.	Section 3.10.7
Local Resident	Community Health, Safety and Security	I am not against gasification if it does not bring harm to residents and local fauna.	Section 3.8.1 Section 3.11
Local Resident	Socio-economics	Trucks should not generate dust. Noise from trucks should stop.	Section 3.10.2
Local Resident	Socio-economics	We need a school, a kindergarten in Rassvet.	Section 3.10.7
Local Resident	Other Issues	We need GRP (gas distribution/ regulation station) at "Pole Chudes".	Section 3.16.1

Type of Stakeholder	Topic Area	Comment	Response provided in ESIA Addendum
Local Resident	Socio-economics	The project should build a bypass road near Zarya settlement so that we have no dust in our community.	Section 3.10.2
Local Resident	Socio-economics	We need a school, a new big kindergarten and a children's playground.	Section 3.10.7
Local Resident	Other Issues	I think that South Stream Offshore Pipeline will bring a flow of monetary resources to the budget of the country.	Section 3.16.2
Local Resident	Socio-economics	The traffic flow should have bypassed the communities.	Section 3.10.2
Local Resident	Other Issues	The project is good for the economy and politics.	Section 3.16.2
Local Resident	Socio-economics	Heavy trucks are destroying the road and bring harm to the environment.	Section 3.10.2
<b><i>Comment Forms - Supsekh</i></b>			
Local Resident	Other Issues	I support the Project.	Section 3.16.2
Local Resident	Other Issues	Take away Krasnodar Krai Governor. There will be no "pig plague".	Section 3.16.4
Local Resident	Socio-economics	Gai-Kodzor landscape has changed. Kavkaz vineyards were destroyed.	Section 3.10.6
Local Resident	Other issues	Not a single kilowatt of electrical power was provided to Supsekh	Section 3.16.1
Local Resident	Socio-economics	Only newcomers/outsideers are busy in construction works - no jobs were created.	Section 3.10.1

Type of Stakeholder	Topic Area	Comment	Response provided in ESIA Addendum
Local Resident	Cumulative Impact Assessment	Archaeological site was destroyed without informing.	Section 3.14.7
<b><i>Comment Forms - Varvarovka</i></b>			
Local Resident	Socio-economics; Terrestrial Ecology	Implement days off from work for the men [does not stipulate in comment form which men stakeholder is referring to]. Do not dig out the plants. Do not pollute the environment.	Section 3.8.1
<b><i>Email</i></b>			
Business association member	Socio-economics	Good afternoon. On 23 July, a meeting was held in Sukko village to discuss the South Stream Offshore Pipeline Project. This meeting was attended by representatives of Fish Industry Association of Krasnodar. We kindly ask you to send us the minutes of this meeting, as well as (in accordance with our agreement), an appraisal of the Azov Scientific and Research Institute of Fishery and the Fishery and Oceanography Institute in regards to the EIA. References are made in the technical documentation on the flash drive distributed at the meetings; however, there is no text of these appraisals.	Section 2

Type of Stakeholder	Topic Area	Comment	Response provided in ESIA Addendum
Business association member	Socio-economics	<p>I am contacting you via e-mail, since I have had no luck trying to reach you on the mobile phone.</p> <p>On July 24, during the ESIA public hearing of South Stream Pipeline Project in Anapa, I proposed - taking into account an impact on the holiday resort of Anapa and its natural resources - to consider participation of South Stream Transport BV in helping to retain natural resources of the holiday resort and its image as the best health resort for child and family recreation.</p> <p>Representatives of the health and recreation resort of Anapa, represented by the Anapa regional holiday resort association ARKA, believe that changing the sanitary control district borders of the holiday resort (withdrawal of a piece of land from the district territory along the gas pipelines), the reduction of recreational forests, landscape changes, impact on the near shore zones of the holiday resort during the construction process, risks of emergency situations which may exert negative influence on the holiday resort development, allow us to count on the compensation of such damage by the investors of the pipeline system.</p> <p>During the hearing on July 24, the representatives of the South Stream Transport B.V. expressed their willingness to discuss this issue. I reported this at the meeting of the Association. The participants of the meeting unanimously decided to invite South Stream investors to take part, for example, in the development of reconstruction projects for the central city beach Vysokiy Bereg by designing treatment technologies for cleaning the offshore strips of the Anapa bay from biomass and filamentous alga.</p> <p>Therefore I would like to ask you kindly to provide the information on whether it is possible to organise a meeting for the representatives of South Stream Transport B.V. and the health and recreation resort of Anapa (ARKA Association includes the directors of the largest resorts, Anapa City Council members and Krasnodar Krai Legislative Assembly Members).</p>	Section 3.10.7