

Stakeholder Engagement in the Digital Age *Lead author: Vanessa Sanderson (AECOM)
Co-author's: Barnaby Burman, Russell Foxwell
(AECOM) and Iain Wood (South Stream Transport)*

Abstract

Advances in digital technology, such as social media, have changed the way that stakeholders potentially affected by development projects can communicate, and the effects can be seen globally. Increasing pressure from NGOs and media has seen the industry trend towards greater transparency and accountability. International lenders have updated their best-practice guidelines accordingly with the IFC PSs requiring private sector actors to develop effective consultation that is both a two-way process and documented (IFC, 2012). These changes have raised the importance of public opinion in determining the viability of projects for many lenders.

In response, the private sector has sought to take advantage of new digital opportunities; in particular, exploring how new technologies can manage this increasingly complex stakeholder engagement process, and serve as effective environmental and social management tools, through bespoke database systems. This paper will argue that for large, complex and transboundary projects proponents will benefit from the development of a bespoke database that can respond to the needs of the project as it evolves.

This paper will examine a case study of a transboundary pipeline project (client confidential) which developed a stakeholder consultation database using Microsoft SharePoint. The project will be developed across three countries, involving a wide range of stakeholders and large volumes of data including consultation records, feedback, and commitments. Using the case study, this paper will discuss the benefits and challenges of using an innovative method to manage this process. This paper will conclude by providing recommendations to manage social risk and reputation for the private sector.

Introduction

Globally new technological advances have changed the way that stakeholders communicate and public opinion has become increasingly important in determining whether a project will be successful (Luoma-aho, 2015), initially in terms of securing a construction permit, and thereafter during construction, operation and decommissioning phases. Social media and NGOs use new digital technologies to call for greater transparency from companies about their projects and the potential impact on stakeholders. In response to these changes, international lenders and the private sector have increasingly begun to recognise the importance of stakeholder engagement and the 'risks associated with poor stakeholder relations' (IFC Good Practice Handbook, 2007, p 1)¹. This development is reflected in International Finance Corporation's (IFC) Performance Standard (PS) 1 that recognises 'the centrality of stakeholder engagement to all other aspects of environmental and social performance' (IFC Good Practice Handbook, 2007, p 1).

The IFC PS 1 requires companies to engage in effective consultation that is a 'two-way process' and to provide 'adequate documented evidence of such engagement' (IFC Performance Standard 1, 2012, p 8). IFC guidelines also recommend that companies begin consultation early in the project lifecycle and maintain stakeholder engagement throughout (IFC, 2007). In order to meet best practice guidelines the private sector has turned to new technological advances to improve the management of stakeholder relationships and social risk, with companies increasingly using database systems to facilitate this process.

Stakeholder engagement is challenging and can comprise multiple consultations, using different types of interaction, over large geographical areas, and including different stakeholders with different interests. The intensity of stakeholder engagement activities also changes over the project lifecycle according to the project phase. In the ESIA phase, stakeholder engagement is focused on collecting feedback to strengthen the assessment of environmental and social impacts, development of appropriate mitigation measures, and inform design and schedule. While in construction and operation phases, stakeholder engagement is a management function of the project, focused on maintaining stakeholder relationships and addressing and monitoring impacts. For transboundary

¹ A stakeholder is considered to be any individual, group or organisation potentially affected by a project, or which has an interest in, or influence over, a project.

projects that extend across multiple countries with different languages, priorities, regulations and political and social contexts, stakeholder engagement becomes even more complex. In addition, stakeholder engagement is often managed by a small social team that may only be hired for pre-operation phases.

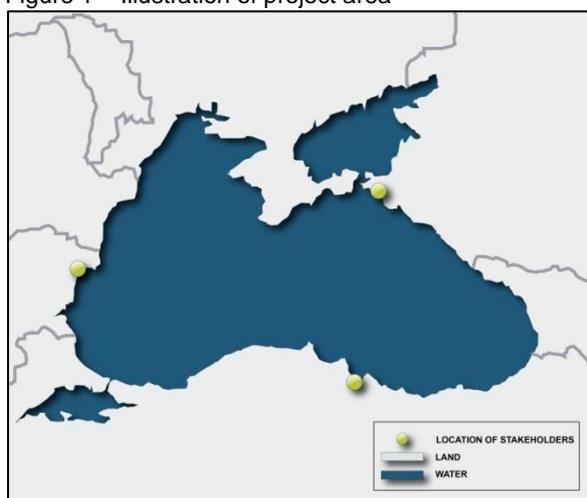
A stakeholder database can enable a project to more effectively manage these challenges (Philip, 2004) and the stakeholder engagement process by retaining an institutional memory of the project as it proceeds from one phase to the next, and creating a centralised system for recording individual stakeholder details (name, contact, stakeholder group), record of all consultations, engagement activities, feedback, commitments, and grievances (IFC, Good Practice Handbook, 2007). An advanced database can act as a management tool, helping the project to manage social risks and priorities.

This paper examines the experience of using an innovative technological approach on a large transboundary gas pipeline project that developed a stakeholder consultation database (SCD) as a way to manage the stakeholder engagement process. The authors' undertook a qualitative review of the case study of an SCD based on two sources of data: participant observation and document review. This paper will begin with a description of the case study, followed by the design of the SCD and a discussion of the benefits and challenges that were encountered by the project team. This paper will conclude with the authors' conclusions and recommendations for using a stakeholder database system to manage social risk and reputation.

Case Study

The transboundary gas pipeline project (hereafter 'the project') is over 900 kilometres long and crosses three country boundaries. The project has 11 stakeholder groups² of which there are over 750 individual stakeholders, and there have been over 370 meetings³ with stakeholders for the ESIA phase. Figure 1 illustrates the geographical area of the project and project stakeholders.

Figure 1 – Illustration of project area



To help manage the stakeholder engagement process the project developed a stakeholder consultation database (hereafter 'SCD'). The team responsible for developing and managing the SCD comprised the stakeholder engagement team (responsible for the project's stakeholder engagement process), IT development team (responsible for developing the database in SharePoint), and an SCD coordinator (responsible for overall coordination between these two teams).

The SCD was developed so that it could capture the following social data:

- Stakeholder group
- Contact details (name, address)

² These groups were: Landowners, Land Users, Marine Area Users, Local Communities, NGOs, Academic and/or Research Organisations, Business and Business Associations, Community Services and Infrastructure, Inter-governmental Association, Government (national, regional, local), and Media.

³ The meetings held included one-to-one, roundtable, public and community meetings, and drop in sessions.

- Stakeholder comments, suggestions and concerns (linked to individual stakeholders)
- Consultations held and correspondence exchanged (topics discussed, outcomes of discussion, keywords, location, date, time)
- Attendance
- Any additional observations about the meeting or stakeholders
- Company actions, staff responsible and due date
- Any commitments made by the company
- Any grievances lodged

To assist the capture of this data, and to facilitate the uploading of the data onto the SCD, data collection tools⁴ were developed by the stakeholder engagement team. These tools were shared with the IT development team to inform development of the SCD, and were also used for collecting stakeholder data during the ESIA phase. As a result, the data fields and format were the same in the SCD, speeding up the process of uploading stakeholder data by the stakeholder engagement team. Bespoke reporting tools were also developed in the SCD that could extract the data and present it in a report format. SCD reporting was designed so that it could ‘drill down’ in the data, and provide analysis and several different reports to export. It was possible to extract data by country, stakeholder group, individual stakeholder, keyword, and all data could be exported into Excel.

Design of the SCD

The principal concern of the project was a system that could service the entire lifecycle of the project, and the effective management of stakeholder consultation data, ensuring that the relationships between stakeholder, stakeholder feedback, keyword, meeting and grievance were all stored in a system that was easily understandable and accessible. Figure 2 shows the relationships developed in the SCD.

Figure 2: Relationships in the SCD



The project needed ‘flexible system’ architecture because of the size and complexity. As a result, it was decided to prepare a bespoke system to fit the specific needs of the project, instead of using an off-the-shelf solution and being restricted by programme limitations or inflexibility. The IT development team followed an Agile Software Development ‘philosophy’, in which the project and system could change to the needs of external pressures, such as ongoing development while being used and increasing integration with other project systems (Agile Alliance, 2001). To ensure the system met the specifications outlined by the project, the database was developed in Microsoft SharePoint 2010 as the project was already using SharePoint and all project staff were familiar and proficient in using this platform. The decision to use SharePoint was the most challenging aspect of the initial phase of detailed design because it is not a traditional database platform but a document management system. Data integrity and consistency were major drivers in the design of the system and the SCD was built with the ability to manage edits to ensure any changes could be cascaded throughout the database.

⁴ The tools included templates for recording minutes of meetings, attendance sheet, meeting record for data collection, comment form, and feedback form.

Benefits

There were a number of benefits from using the SCD to manage the stakeholder engagement process on this large transboundary pipeline.

Developing the SCD on SharePoint meant that the database was **accessible** by anyone with access to the internet, and could be accessed by multiple people at any one time. Staff in the field and staff at headquarters could both access the SCD ensuring that this multi-purpose tool encouraged cost-effective and efficient communications between members of the stakeholder engagement team and headquarters.

The SCD was developed to be **simple** and easy to use for uploading and managing data. Having a database system that was simple for the stakeholder engagement team to use and keep updated created efficiencies and cost-savings. In addition, this meant that it was usable and could be explained to any new staff members quickly.

The SCD provided a **centralised system** for tracking and managing all stakeholder engagement. All documentation of stakeholder engagement activities were in one centralised database ensuring transparency and appropriate documentation of stakeholder engagement for auditing purposes by third parties. Using a bespoke SCD designed to the specifics of the project ensured there was more efficient management of a large volume of data, across three different countries and different languages, by a small stakeholder engagement team.

The SCD is a record of all project stakeholders, key stakeholder issues, potential social risks, and existing social conditions creating a means to store and retain institutional knowledge developed over a long period. This was especially critical when the stakeholder engagement team was small and project staff left before the operations phase had begun. The SCD created an **institutional memory** of the stakeholder engagement process over the life of the project avoiding the need to re-learn lessons and ensured existing data was used to maximum efficiency, despite staff changes.

Having a record of all project stakeholders, individual (and group) stakeholder concerns, and knowledge of stakeholder engagement activities from the start of the project, meant that the stakeholder engagement and project team could use the SCD to manage stakeholder relationships, helping to create positive relationships and **building trust** with stakeholders. It also enabled the stakeholder engagement team to elicit stakeholder preferences for being consulted and communication methods, informing how the project targeted and communicated with stakeholders. This ensured better and 'smarter' management of social risks and priorities, resulting in more informed community investment programmes, maximising returns on company investments.

The SCD was also developed to be used as a **management tool**. Actions that came out of meetings with stakeholders or internal project meetings were uploaded onto the SCD, marked with a priority rating (low, medium, high), the project member assigned responsibility, and the stakeholder or stakeholder group that it was linked to. This enabled appropriate follow up on actions and project staff to understand the history of engagement with particular stakeholders before communicating or attending a meeting. The SCD also acted as a management tool by feeding into the development of EIA and ESIA reports, environmental and social management system (ESMS), and **management plans**. The SCD fed accurate baseline information, comments, and project commitments from stakeholder consultations into these project documents, enhancing identification of potential project impacts and thereby enabling effective mitigation measures. Thereafter it supported the management of impacts and grievances. Using the SCD as a management tool facilitated better management of both environmental and social risks and priorities.

The SCD was developed using a **modular approach**, which allowed new modules to be added to the system at any time. For example, a grievance management module was developed and added to the system during the ESIA phase, so the stakeholder engagement team could manage its grievance procedure through the SCD prior to the project entering the construction phase. This flexibility improved the system's functionality, and enabled it to respond to changes, which is not available with off-the-shelf solutions.

The SCD was developed with security in mind and had the ability to administer different levels of **user and access rights**. Each individual user was given specific access rights, for example, Administrator Level which would allow that person to make edits to the system and delete content, to Basic Level

which only allowed a user to read content on the SCD and run reports. Giving each user an individual login meant that senior management could review the progress of stakeholder engagement activities at any time, by using the built-in reporting and analysis tools.

Challenges

The stakeholder engagement team experienced a number of challenges when developing and using the SCD.

Due to the transboundary nature and size of the project there was no 'live' data upload into the SCD. This created time lags between completing a consultation, performing any actions arising from the stakeholder meeting, and then inputting this data into the SCD. In addition, human error remained a factor and there was a reliance on the quality of inputs (meeting notes, attendance sheets, record of company actions) which was dependent on the level to which staff completed minutes, quality of translation from the local language into English, and the need for all project teams to share the same commitment to record information and store this centrally.

For effective data management, the stakeholder engagement team developed an agreed coding framework⁵ consisting of themes and sub-themes that were agreed prior to data upload into the SCD. However, there were issues in assigning the correct keyword to data, with staff responsible for data input often not present at the meetings themselves. This presented limitations in the coding of data and problems for tracking and analysing social information.

The SCD team consisted of stakeholder engagement staff, IT developers, and an SCD coordinator who had experience in database development and stakeholder engagement. At the beginning of the process, there were communication difficulties and issues in terms of managing the expectations of the stakeholder engagement team, and making the SCD team aware of any technical limitations.

The size of the project and the fact that it involved three countries with different regulations and legal contexts, presented a number of challenges. When using the database and collecting stakeholder data, the stakeholder team had to ensure that it was not in conflict with any privacy rights across the different countries and ensured data security.

Conclusion

The SCD was essential for managing a large volume of stakeholder data (consultation records, stakeholder contact details, feedback, project commitments, grievances) across three different countries, and for effective implementation and management of the stakeholder engagement process and social programme. There are a number of existing stakeholder engagement database systems on the market but they did not fit the specifications required for the project, including being hosted directly by the client and project, having an in-built document management system compatible with SharePoint, a system that can be managed, refined and developed in-house, and data structures and relationships that are defined by the project (i.e. specific fields and lookups).

By being able to store detailed information on stakeholders the SCD facilitated building and maintaining positive stakeholder relationships. It provided a centralised system for tracking, documenting and managing the stakeholder engagement process which was necessary for the small stakeholder engagement team managing the process across three countries. Crucially it is a source of institutional knowledge that will remain in place even as the team changes and staff leave. Despite challenges this case study demonstrates that the SCD was an essential tool that will last the whole project lifecycle.

Recommendations

Based on the analysis of this case study, the following key actions are recommended to enhance best practice:

- For large, complex and transboundary projects develop a **bespoke database**.
- Develop a **web-based** database system that is **multi-user** and can be accessed by multiple project staff anywhere.

⁵ A code is a descriptive label (keyword) assigned to an excerpt of qualitative data. The codes create a framework for organising and managing qualitative data, as well as reducing the data for analysis.

- Ensure **proper training and communication** to ensure the tool is effectively used by all project staff and encourages use by other non-stakeholder staff.
- **Limit the number of staff responsible for data input** into the SCD to ensure consistency in the coding of data and document control.
- Keywords and themes should be **agreed prior to data upload** to prevent inconsistency in coding and adding new keywords should be avoided.
- **Start early**, to avoid any delays with implications on schedule and budget.
- **Manage expectations** by ensuring the design team includes both IT and stakeholder engagement experts.
- **Clear communication** between stakeholder and IT teams.
- IT database developer needs to have a **strong understanding of stakeholder databases** and how they are used and the stakeholder engagement team should have some experience of developing databases.
- Develop **data collection tools that are designed to work with the SCD** to ensure data upload is as efficient as possible.
- **Contact legal teams early** in the process to clarify data security and privacy rights for the jurisdictions of the project.

References

Agile Alliance (2001) *Manifesto for Agile Software Development*. Accessed at <http://www.agilemanifesto.org/> on 5 January, 2015

International Finance Corporation (IFC) (2012) *Assessment and Management of Environmental and Social Risks and Impacts: Performance Standard 1*

International Finance Corporation (IFC) (2007) *Stakeholder Engagement: A Good Practice Handbook for Companies Doing Business in Emerging Markets*

Luoma-aho, Vilma (2015) *Understanding stakeholder engagement: Faith-holders, Hateholders & Fakeholders*. A paper to be published in the Research Journal of the Institute for Public Relations

Philip, R.A. (2004) *The Development of a Stakeholder Management System (SMS) as a Tool for Conducting an Effective Public Participation Process*. Proceedings of the 2004 Water Institute of Southern Africa (WISA) Biennial Conference