

# Overcoming barriers – Relation building in Brazil by new entrants from the Norwegian oil and gas SMEs.

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## **Abstract**

The motivation and purpose for writing this term paper was to improve the knowledge and understanding of how Norwegian businesses can increase their success of entering in the Brazilian oil and gas industry market. The paper builds a theoretical framework based on global expansion theories, business network theories, and intercultural management theories. Rather than aiming at the building of new theories, the methodology and analysis are aimed at comprehension and achieving knowledge from the experience of a limited number of companies.

The aim of the work is prepare suggestions for improvement on the services offered by Innovation Norway to companies with the ambition to do business within the oil and gas sector in Brazil.

We have found that global expansion, even into difficult markets such as Brazil, is considered worthwhile by Norwegian SMEs, but it takes resources, dedication, courage, and patience. Network expansion, based on available networks in Norway, is successful as a prime strategy for landing the first commercial contract. Various networks can be employed, from academic connections to business clusters.

In addition to the set of suggested modification of the FRAM Market curricula, we also recommend an increased dialogue concerning these programmes and services throughout the Innovation Norway organisation.

As the authors are not to be identified for grading purposes, we have given ourselves the pseudonyms John and Jack.

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# **1 Introduction**

## **1.1 Paper background and problem formulation**

The Norwegian government has identified Innovation Norway (IN) as the primary political tool for developing a sustainable industry in Norway (St. Meld Nr. 22, 2011-2012). Part of the given scope of work is to support Norwegian companies aiming at an international presence, meeting a global competition both in the Norwegian and foreign markets.

The Norwegian Government has furthermore identified Brazil as one of the countries with which the government will put special emphasis on developing well founded and long term relationships, Norwegian Ministry of Foreign Affairs (2011). Working through the Ministry of Trade and Industry and IN, it has also put emphasis on the importance of developing good commercial relations between companies and institutions in the two countries. This intention is replicated by Brazilian authorities, in particular by contributing to the signing of the Memorandum of Understanding between Petrobras and IN. The MoU describes how Petrobras shall identify technology areas where foreign input and suggested solutions are requested, while IN shall identify companies representing new and newly developed technology suitable for the Brazilian challenges identified.

IN has also carried out a NAVIGATOR (N) programme for a limited number of companies aiming at entering the Brazilian market in the period 2011 to 2012. Details on the N programme are outlined in annex III.

Brazil and the Brazilian business culture are markedly different from the business culture in Norway and US (Lewis 2006). This, in addition to the vast opportunities in the Brazilian oil and gas market (Norwegian Ministry of Foreign Affairs ,2011), makes selection of Brazil as focal market relevant.

Brazil has also been identified by Goldman Sachs (2003) as one of the Emerging Economies (EC), even one of the BRIC countries (Brazil, Russia, India and China). Goldman Sachs models an impressive future for these economies. However, according to our understanding, Norwegian SMEs from the oil and gas sector will rather prioritize Brazil based on the huge market potential created by

the substantial finds of the “Pre-Salt Area” offshore Rio de Janeiro and the ambitious plans for increased production outlined by Petrobras.

The relational aspect is considered particularly important for Brazilian business by several business observers and advisors. In order to establish a business relation, it is important first to establish trust between the persons representing the parties before the actual business relation is established. As this is based on personal relations, it is quite different from the Norwegian business culture. For new entrants coming from the Norwegian business, the relational aspect is the first peculiarity of the Brazilian business culture.

For the decision makers that decide the future and funding of N programme as well as potential participants, it would be most useful to answer the simple and direct question “Is the programme worth it?” based on the success rate of the participating companies compared to non-participants and balanced with the amount of resources put into the programme. However, we imagine there are many other parameters than the programme that influence success or not, like financial muscle, previous international experience, competence of employees, market conditions for the specific product or service portfolio, management commitment, quality of internationalization strategy and so on. We find that it would be very difficult to reliably isolate the programme parameter as a success criterion. The financial net value is also difficult to evaluate given the many perspectives. However, you cannot conduct good business without good contacts and relations. Although it does not address the “ideal” question, we have therefore chosen to study this perspective as an indirect parameter for success.

From these introductory remarks it is interesting to consider and evaluate the tools and support mechanisms available to the focal company in the light of the importance of business networks in the recent models for internationalization. IN’s N programme is the most comprehensive tool for competence building and support for Norwegian companies wanting to expand internationally offered by IN, and our study will therefore focus on this programme and how it contributes to the establishing of relevant business networks.

It is not the scope of this paper to evaluate the different elements of the N program in detail. That is part of the internal routine procedure at the end of every

program. Our focus is what the program contributes to overall, not the quality or suitability of each element.

From the above, the following research question is posed:

“To what extent does the Navigator programme establish or provide access to relevant and useful business networks and contacts for Norwegian companies planning an entry into the Brazilian market?”

## **1.2 Overview of the paper**

The authors have prior knowledge and experience from working both in private companies in the oil and gas sector, as regional responsible for the oil and gas sector in IN Sør-Trøndelag and through managing exports to Brazil. At the same time, the oil and gas sector are among the most internationally oriented sectors where products and services are offered in the international marketplace by companies from many countries. It is as such a business sector where the international competition is present in the Norwegian companies' home market, while deliveries made in Norway will be relevant as references in Houston, Rio de Janeiro and Hanoi. The authors' prior knowledge will not reduce the necessity to document observations and facts.

In Chapter 2, we discuss the implications from theories on Global Strategy, Intercultural Management and Business Network on the selected research question.

After this discussion on relevant theory we will in Chapter 3 discuss and state the reason for using qualitative analysis as the selected research method. We will also outline the use of matched pair of companies having participated in the N programme comparing their experience with companies established in Brazil without the N Programme support. We have used semi structured interviews as mean of extracting the information from the companies.

In Chapter 4 we will present our observations through selected quotations from the interviews, we will furthermore seek improved understanding of the observations by comparing relevant quotations with the presented theories. As a summary, we will look into the validity of the observations and conclude by answering the research question posed.



In Chapter 5 we conclude the paper and suggest both further research in the area, and improvements of the N program as seen from our perspective.

## **2 Theory**

### **2.1 Introductory remarks**

In this chapter, we will reflect and relate to established theory and discussions from three different sources

- i. Global expansion theory
- ii. Intercultural management theory
- iii. Business network theory

We anticipate that theories and research from the global strategy arena will provide us with a deeper understanding of the driving forces behind the companies aim at entering into international markets.

In addition to the geographical distance between Norway and Brazil, there is a fairly large cultural difference. It is interesting to consider to which extent this expected difference raises barriers between Norwegian companies and their Brazilian customers, keeping in mind the long traditional trade between Brazil and Norway, coffee one way and cured cod (*bacalao*) the other way.

Business observers, supported by findings from the field of Intercultural Management, put emphasis on the connection to proper networks when aiming at business in Brazil. We will also look into the theory of social networks, as outlined by Wassermann and Faust (1994). We anticipate that we can find ways to characterize various networks, and thereby identify what kind of networks is important for our focal companies as they are in the entry phase into the Brazilian market. Dantas and Bell (2009) outlines taxonomy for knowledge networks, and look into the development of Petrobras' knowledge network from a passive learning in the late 1960 to strategic innovation by the year 2000. We will look into their work for both inspirations on network analysis and as a key to understand Petrobras' role in the oil and gas sector in Brasil.

## 2.2 Global Expansion Theory

The main focus of the research within this field is the multi-national corporations (MNC). ‘MNCs are large companies producing in countries outside their home country and operate in global markets’ (Horn and Faulkner 2010: 26). On the other hand, the main targets of IN’s support mechanisms are the small and medium sized Norwegian companies (SMEs). We will refer to observations and theories that provide background and understanding of the driving forces behind global expansion. Horn and Faulkner’s book (2010) provide the following outlines of selected theories:

### 2.2.1 The eclectic theory and industry analysis

Dunning’s (1998, in Segal-Horn and Faulkner 2010, 26-27) ‘eclectic paradigm’ consists of three factors:

*Ownership (O)* imply that the company owns certain key resources or capabilities giving advantage in certain markets

*Localization (L)* is about location of activities of the MNC. It means that the MNC finds it an advantage to locate an activity in a particular local market to benefit from some comparative advantage ... or to avoid national or regional tariff barriers.

*Internalization (I)* suggest that there are advantages to carry out certain activities internally within the MNC, because not doing so would generate a high risk of losing proprietary knowledge to potential competitors.

For Norwegian SMEs, these factors are highly relevant:

(O) They typically owns key resources such as intellectual properties IP , or capabilities and references developed in the Norwegian oil- and gas market, that are applicable and gives an advantage in the international oil- and gas market.

(L) Due to the heavy import tariffs put on import of goods to Brazil and the requirement of local content on large projects, Brazil is not necessarily the market of choice. On the other hand, the subsea market offshore Brazil is one of the largest market globally, and the investment plans of Petrobras makes the market very interesting.

For a number of the Norwegian SMEs delivering products and services to

Petrobras and Brazil, their part of the major projects are so small that the main contractor include them in the international supply part of the project.

(I) The risk of losing proprietary knowledge to competitors are fairly high for all our focal companies. Their prime basis for staying in business is coupled to their capability of maintaining the competitive edge by being the sole company with the capability and resources (IP) in question.

According to the theory of foreign direct investments, and of alternative organizational forms to develop business across frontiers, there are a limited number of alternatives. Rugman (1980, in Segal-Horn and Faulkner 2010, 27) developed a rational decision tree for choosing between four alternatives for international trade. This decision tree and the conclusions are relevant for Norwegian SMEs from the following observations:

- i. There are extensive barriers to free trade from Norway to Brazil, consisting of both import tariffs on goods to Brazil and requirement of local content, i.e. percentage of projects executed in Brazil.
- ii. The risk of dissipation of knowledge will vary from company to company.
- iii. For the majority of these companies, resource limitations will induce them to consider the risk of knowledge dissipation as containable, and they will engage in strategic alliances.

As seen from this fairly basic perspective, foreign direct investment (FDI), licensing of production and strategic alliances are open for our focal companies.

Porter (1980) recommends analyses of various industries through analysis of five forces acting within the industry. For Norwegian SMEs, who already are firmly based in the oil- and gas industry, it is more a question of being prepared for the forces at play within the Brazilian sub-market. Based on input from business observers, we may broadly outline the forces as follows:

- i. The power of the customer, in particular Petrobras, is vast. Although there are other oil companies also operating in the industry in Brazil, the customers bargaining power is strong.
- ii. Power of the suppliers: The Brazilian government has established a policy of 'local content' in relation to the larger contracts awarded as part of the oil and

- gas development offshore Brazil. This policy has increased the local suppliers bargaining power versus local and foreign companies seeking their services.
- iii. The strength of the competition from established actors in the market should not be neglected, in particular for companies with limited economic and personnel resources.
  - iv. Being a new entrant into the market, the Norwegian SMEs must be aware of their part of the play. They might be considered a new entrant with a product or service already available in this market, or they might be a substitute with a different product or service. In both cases, they might be met by hostile reactions from companies already established in the market.
  - v. If the Norwegian SMEs are able to establish a presence in the market, they must be aware of the probable threat of substitutes, in particular from Brazilian companies.

As the Brazilian market is characterized as an emerging market, there might be 'institutional voids' as Khanna et al (2005) argued. There are components of the business infrastructure that Norwegian companies take for granted that are different in the Brazilian marketplace. As an example we can mention: Business observers has pinpointed the contract-enforcing mechanisms as different from mechanisms implemented in developed economies.

We will later in the theoretical discussion look into to which extent the oil and gas industry is already a global business, hence that this discussion is just as valid for companies wanting to stay in business in Norway.

### **2.2.2 Global expansion for SME's**

Segal-Horn and Faulkner (2010, 121-124) identifies a set of barriers for SMEs to go global. Among these are lack of capital and other resources, inadequately developed global networks, difficulty in establishing a differentiated market niche, and a weak brand name. Against these formidable barriers, a set of factors are identified that can support a SME's international ambitions (Segal-Horn and Faulkner 2010; 124-125):

- \* Finding markets where there are few economies of scale.
- \* Develop a network of partners (which will be discussed later in the paper)
- \* Attract adequate back-up capital

- \* Offer a differentiated niche product difficult to replicate
- \* Develop close relationships with key local government ministers or officials.

The Brazilian offshore oil and gas industry is presently moving into deeper water and more complex projects by the day. This is hence a market where the standard products are on the borders of their applicability and definitely outside the work conditions where they have their main market. It is a market where there are presently few economies of scale, and where the clients are by necessity forced to look into alternative solutions, services, and products.

Many Norwegian SMEs, with references and experience from the Norwegian oil and gas industry, have potential for global expansion. Their products and services are partly spin-offs from university and the research community in Norway, developed into commercial offerings through close collaboration with Norwegian clients. From this perspective, their starting point is a differentiated niche product that might be difficult to replicate. In addition, their experience from delivering the product or service to the Norwegian oil and gas industry, has furnished them with internal tacit knowledge that is highly valuable for the company.

So both Ownership and Internalization are important to these companies.

Having a niche product that is difficult to replicate is close to the idea of monopolistic competition as outlined by Chamberlain (1939). The companies are then aiming at a competitive edge by claiming that their products are replaceable by the competitors only to a limited extent. The companies seek a market niche in which they have the power by virtue of their committed customers. In this niche they are able to set their own price and are not governed by 'market price'. It may be said that they control 100% of the market share for their product or brand, but they are vulnerable to the challenge of a market where other products can be evaluated as substitutes. Thus they are able to reduce their unit cost through economies of scale, and if they are multiproduct companies, often economies of scope as well.

In section 2.5 Concluding remarks, we will discuss how these theories can point into expected findings when we start our analysis.

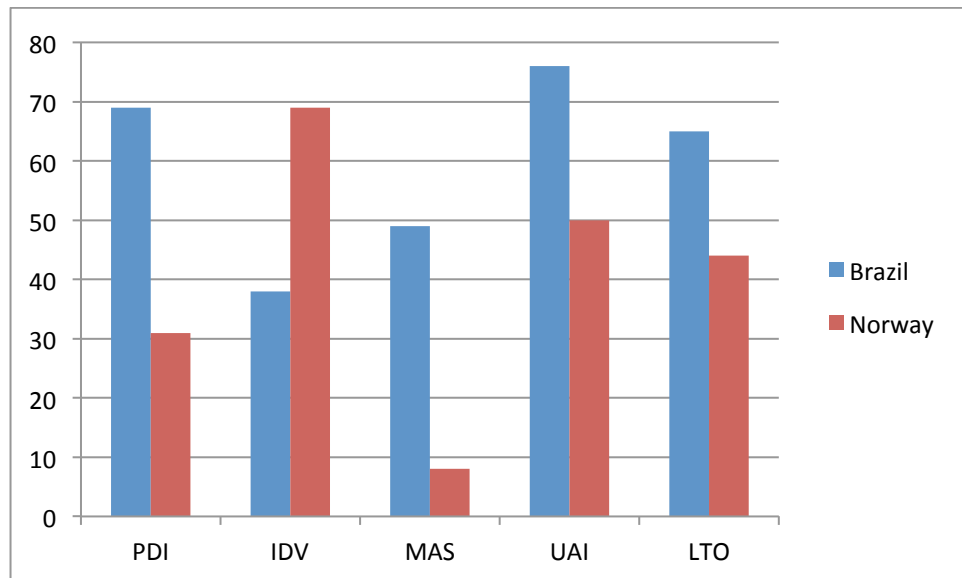
## **2.3 Intercultural Management Theory**

### **2.3.1 Introductory remarks – Cultural dimensions**

The introduction to our research question implicitly assumes that there are differences between the Brazilian and Norwegian business culture. Starting at the core, Browaeys and Price (2011) outlines a set of cultural ‘dimensions’. The dimensions ‘are concepts that allows variations between the attributes of cultures to be quantified’ (Browaeys and Price 2011; 23). There are several set of ‘dimensions’ that might be used to distinguish between cultures and as prescriptive directions on how to deal with other cultures. Geert Hofstede’s research in this area is well known, and the results were used to produce a comparison between cultures along five dimensions:

- i. Power distance (PDI) (high/low): attitudes to authority, the distance between individuals in a hierarchy
- ii. Individual versus group orientation (IDV): independence and interdependence, the loyalty towards oneself and towards a group.
- iii. Masculine versus feminine orientation (MAS): importance of work goals compared with personal goals
- iv. Uncertainty avoidance (UAI) (high/low): the degree of tolerance for uncertainty or instability
- v. Short term versus long term orientation (LTO): fostering virtues related to the past and present or virtues related to the future.

In the figure below, there is made a comparison between the datasets for Brazil and Norway.



Annex I contains the description of the two business cultures, according to Hofstede (2013)

The GLOBE project and Trompenaar (2000) have described and mapped different national business cultures along cultural dimensions partly based on, partly refined from the basis of Hofstede's five dimensions. However, the fewer dimensions of Hofstede are sufficient for our scope of work.

Lewis (2006) takes on another approach. Looking into the communication pattern and the handling of time, he outlines three main characteristics: the linear-active, the multi-active and the reactive. Based on his set of data, he has developed a triangle where Germany, Switzerland and Luxembourg occupies the extreme linear-active corner, Vietnam the extreme reactive corner, and Argentina, Brazil, Mexico and Chile the extreme multi-active corner. Other business cultures are characterized and identified along the continuous line between the three extremes.

Again, the Brazilian and Norwegian business culture are positioned rather far from each other, although the Norwegian culture is along the axis from Linear-active towards the Multi-active.

### 2.3.2 Culture differences – so what?

Looking at the perceived difference in business culture, it may be a surprise that Norway and Brazil has had a blooming trade for decades, almost centuries, with coffee from Brazil to Norway, salted and dried cod '*bacalao*', the other way.

During the last decade, the Norwegian actors within the oil and gas industry have

been able to establish and maintain flourishing business in the Brazilian market. What is the crux in this connection?

Trompenaars (2000) emphasises the importance of culture reconciliation. This reconciliation 'leads to a dynamic equilibrium between seemingly opposing values which make up a dilemma. In fact, reconciliation results in the integration of values through synergy.' (Trompenaars 2000, referenced in Browae and Price 2011, 108). Estienne (1997, referenced in Browae and Price 2011, 109) outlines and describes five stages to the reconciliation process necessary to reach this dynamic equilibrium:

- i. Reaffirm the commitment to the on-going relationship and its benefit to both parties
- ii. Recognize where and how the parties differ
- iii. Continue by searching for similarities
- iv. Synthesize the solution or create outcomes which utilize the most appropriate elements of the opposing cultural dimensions
- v. Review the learning process, capture it, and make available for the future.

Trompenaars and Woolliams (2000, referenced in Browae and Price 2011, 104) developed a framework for the 'millennium manager' combining the seven cultural dimensions with a range of dilemmas. According to their findings, the 'millennium manager should:

- i. Regarding universalism versus particularism  
Recognizes, respect and reconcile allegiance to rule-bound activity or unique circumstances
- ii. Regarding individualism versus communitarianism  
Recognizes, respect and reconcile the individual employee's development, enrichment and fulfillment or the extent to which the corporation and customers should be the beneficiaries of personal efforts.
- iii. Regarding neutral or affectivity  
Recognizes, respect and reconcile the legitimacy of showing or controlling feelings
- iv. Regarding specific versus diffuse  
Recognizes, respect and reconcile the tendency to analyze and break down



the field of experience or to synthesize, augment and construct the experience

- v. Regarding achieved or ascribed status  
Recognizes, respect and reconcile why status is conferred on people
- vi. Regarding sequential or synchronic time  
Recognizes, respect and reconcile different meaning and priority given to time passing in sequence or coming around and around.
- vii. Regarding inner or outer directed  
Recognizes, respect and reconcile whether the locus of control is inside or outside the people involved.

The table above is extracted from Browaeys and Price (2011, 104-105).

## **2.4 Business network theory**

### **2.4.1 Introductory remarks**

Peter Drucker (2003, referenced in Pelle 2007, 165) reflects on the three needs of a healthy society: effective government, business and community organizations. We have already discussed one of the characteristics of emerging markets, the ‘institutional voids’.

The concept of ‘institutional voids’ was coined and argued by Khanna et al (2005). According to Narayan and Fahey (2005), it is inappropriate to use ‘competitive rivalry’ as one of the five forces acting in an industry in an emerging market. In developed economies, legally enforced rules govern competition, anti-trust policy and protection of intellectual property. In emerging economies, such laws may either not exist, not be enforced or the enforcement may be a long and devastating experience with uncertain outcome. Therefore the notion of ‘competitive rivalry’ has a completely different content in emerging economies. In the absence of such rules, the importance of connections and network-based strategies is important. Segal-Horn and Faulkner (2010, 90) concludes their discussion of the topic:

“Since emerging economies rely on informal rules and personal relationship amongst socio-political networks, in the short to medium term strategies that are directed towards establishing network ties with firms or individuals or to accessing dominant alliances and government networks,

may be the most effective, indeed the only effective, way of building a market position.”

The terms ‘strategic network’ and ‘strategic alliance’ are often used interchangeably (Segal-Horn and Faulkner 2010, 184). There is, however, a clear distinction between the idea of a network with its implication of close but *non-exclusive* relationships, and that of the alliance which, however loosely organised, implies the creation of a joint enterprise over a domain. Johanson and Mattsson (1991) make a useful distinction: Alliances may be set up for transaction-cost reasons, but networks never are. Networks generally exist for reasons arising from resource-dependency theory. Through relations with customers, distributors, and suppliers, a firm can reach out to quite an extensive network. Such indirect relationships may be very important. They are more manageable within networks than in alliances based on the transaction cost approach (Johanson and Mattsson 1991, 264).

Segal-Horn and Faulkner (2010, 185-186) list 6 different reasons for entering into existing networks or to establish networks around the company:

- i. To reduce uncertainty
- ii. To provide flexibility
- iii. To provide capacity
- iv. To provide speed
- v. To provide access to skills and resources
- vi. To provide information

It is from these observations we have decided to analyze the vital, important and useful initial connections for Norwegian SMEs during their initial phase of market entry.

Our expectations are that Social Network Theory can shed light on how to analyze such initial connections and support the development of the best network for Norwegian SMEs given their challenges in the entry phase.

#### **2.4.2 Social Network Theory**

In their introductory chapter Wasserman and Faust (1997) emphasize ‘... the social network analysis as a distinct research perspective within the social and

behavioral sciences...’ (Wasserman and Faust 1997, 4). The social network analysis is based on the assumption of the importance of the relationship among interacting units. In addition they note the following as important:

- \* Actors and their actions are viewed as interdependent rather than independent, autonomous units
- \* Relational ties between actors are channels for transfer or “flow” of resources (either material or nonmaterial)
- \* Network models focusing on individuals view of the network structural environment as providing opportunities for or constrains on individual actions
- \* Network model conceptualize structure as lasting patterns among actors (Wasserman and Faust 1997,4)

It is noted on several occasions that the relations between the actors can be of vastly different nature: kinship, material transactions, flow of resources or support, behavioral interaction, group co-membership and so on. From this perspective, the analysis of a focal company’s initial entry into a market, seeking information, introductions to vital partners and other non-material resources, and later during the next stages of entry where the focal company seeks customers and suppliers, the social network analysis seems appropriate.

However, for the analysis methods presented by Wassermann and Faust it ‘... is important for methods described in in this book, that we assume that one has measurements on interactions between all possible pairs of units.’ (Wassermann and Faust 1997, 8). Taking into consideration the vast number of actors in the Brazilian oil and gas market, it is outside the scope of this paper to make a mapping and analysis of the ‘social network’ our companies meet, if we adhere strictly to the definitions and methods outlined by Wasserman and Faust.

### **2.4.3 Other Network Theories**

We will therefore use an alternative approach, ‘... that employ network ideas and measurement in standard individual-level analysis. ... such analysis still uses individual actors as the basic modeling unit, Such analysis do not focus on the network structure or network processes directly ‘ (Wasserman and Faust 1997, 9).

International business researchers are emphasizing the necessity of including business networks as one of the variables and factors explaining the internationalization process of the focal company. We will highlight some recent articles in this perspective.

Amdam (2009) advocates adding networks to the understanding of cultural distance based on empirical findings from Norwegian companies going international in the period 1945 to 1980. They identifies five types of network: (i) Personal networks linked to strong personal ties between a key actor in the investing company, and another person in the host country; (ii) Investments made as a result of invitation; (iii) Networks with strong ties to firms that had already invested abroad; (iv) networks created through missionary activities; (v) Networks involving governmental actors. The paper concludes that:

“... by adding the existence of strong personal networks to the definition of psychic distance, the internationalization process theory is very relevant in order to understand the Norwegian internationalization process during the investigated period. By adding the existence of business networks as a dimension influencing the decisions as to when and where to invest, in addition to the other criteria defined as psychic distance, a surprisingly large number of firms followed the pattern suggested by the internationalization process theory.” (Amdam 2009, 458-459)

Johanson and Vahlne (2009) starts out identifying major development since their original article and suggested model for internationalization process, (Johanson and Vahlne 1977). Both the economic and regulatory environment have changed dramatically. Company behavior is also different in some respects. And the research frontier has moved, including coining of new concepts and developing insights not existing at the time of the initial formulation of their model. They emphasize the business network view of the environment facing the internationalizing companies. Their new core argument is based on business network research, and has two sides: “The first is that markets are networks of relationships in which firms are linked to each other in various, complex and to a considerable extent, invisible patterns. Hence *insidership* in relevant network(s) is necessary for successful internationalization, and by the same token there is a *liability of outsidership*. Second, relationships offer potential for learning and for

building trust and commitment, both of which are preconditions for internationalization.” (Johanson and Vahlne 2009, 1411-1412).

Coviello (2006) has also worked on business networks, in particular with a model of “how international new venture networks evolve” during the early phase on internationalization. Johanson and Vahlne’s aim differs from this, in that they focus on business networks as a market structure in which the internationalizing firm is embedded. At the same time, Coviello’s (2006) work is interesting as she shows that “insidership” in networks, developed before the entry into a new market, maybe even before the foundation of the company, is instrumental to the specific internationalization process at hand.

As part of the network discussion, Johanson and Vahlne (2009) also comments on the relationship between various companies in the network. From a large set of studies, they draw the conclusion that the relationships seem to develop through social exchange processes in which the firms involved enact the relationship interactively and sequentially. The result is the accumulation of knowledge and building of trust, and eventually greater commitment. In such a process, weak ties and unilateral dependence can be transformed into strong relationships and bilateral interdependence, and ultimately increased joint productivity. Such development is obtained through experiential learning. Johanson and Vahlne (2009) conclude this part of the discussion by observing “the requirement of reciprocal commitment between the focal company and its counterparts for a successful internationalization” (Johanson and Vahlne 2009, 1414).

Dantas and Bell (2009) starts their discussion on business network from another angle: the learning and innovation system theories. They point out the shift in the focus from capacity building in the individual firms in the 1980 and 1990 to examine the development of learning and innovation systems around the focal companies. Their paper concentrate on the knowledge network defined as

“organizational arrangements that involve actors with different capabilities and that are concerned with knowledge flows and the coordination of learning and innovation: they involve the *acquisition, combination, generation, exchange* and *transfer* of complementary and heterogeneous forms of knowledge.” (Dantas and Bell 2009, 831).

In their analysis, they use five selected properties of the knowledge network to characterize the network:

- i. the *intentionality in decision-making* underpinning the emergence and development of the network
- ii. the *nature of technological accumulation activities* carried out within the network
- iii. the *content and direction of knowledge flow* contributing to further technological accumulation
- iv. the *sources of knowledge flow*,
- v. the *division of labour in knowledge production* between the core nodal player and its partners (Dantas and Bell 2009, 832)

These properties may take various forms. The properties are not dependent, but there are configurations of the properties that give rise to general characteristics of the knowledge network. Dantas and Bell describes four overall patterns: (i) Passive learning network, (ii) Active learning network, (iii) Innovation network, and (iv) Strategic innovation network.

Their main body of data was collected through 114 semi-structured interviews with managers, engineers and R&D personnel in Petrobras and its partners (e.g. suppliers, science and technology organisation) who had been involved in collaboration with the company in the selected 14 technologies.

Their analysis of the data shows that Petrobras has developed its knowledge network in four stages. It started as a *Passive learning network* in the late 1960s up to 1984, can be characterised as an *Active learning network* in the period 1985 to 1991, to an *Innovation network* in the period 1992 to 1996. From 1997 Petrobras' knowledge network has the overall pattern of a *Strategic innovation network*. (Dantas and Bell 2009, 834-838)

Dantas and Bells results are interesting along two lines:

- \* Their methodology and theoretical starting point is different from both the social network theory of Wasserman and Faust, and the internationalization theory outlined by Johanson and Vahlne. Although the sheer scope of their work and volume of data is formidable, and ranges far

beyond the scope of our paper, they are highlighting properties in the transactions between their focal company and its partners that will expand our analysis of our data with additional aspects and augment our understanding.

- \* Their work also presents Petrobras and Petrobras' role in the Brazilian and international oil and gas industry that must be taken into consideration when Norwegian companies are entering this market:
  - When test production started on Ekofisk in 1971, Petrobras had already been producing 95 000 bbl per day (onshore) and accounting for 35% of national consumption since 1961, and had discovered the Guaricema offshore field in 1968 based on their own effort.
  - When Statoil delivered the Plan for development and operation for the Troll field in 1986, Petrobras had stepped up to the second phase of knowledge network development, the *active learning network*.
  - When Heidrun was brought on line in 1995, Petrobras' knowledge network had been in the phase of *active innovation* for three years, and was transferred into the *Strategic innovation network* the same year as Ormen Lange was found offshore Kristiansund.

One may put up the assumption that companies presenting themselves as candidates in a heterogeneous Strategic innovation network have higher probability of success, compared to companies presenting themselves as solution providers.

## **2.5 Concluding remarks**

In this section we use the theories presented, and point towards expected findings in the analysis of the interviews.

*Expected find (EF1):* We will expect the interviewees to comment on the time needed to get the first purchase order or in other context comment on the time needed on the Brazilian side of the business relationship.

We base this expected findings from the discussion of theories on Global Expansion. We emphasize the market position most Norwegian SMEs with global ambitions aim at: They will highlight their product as differentiated, adapted to a niche market. Their product is often recently developed for a Norwegian market in close dialogue with local clients and customers. Through this joint technology development, they also develop a common perception of the technology as differentiated from other available technology. The two companies have nurtured this concept together, spending time on the development of a differentiated product. Once they start their global expansion based on the same market position, they must establish the same common perception with their new clients relating to the technology's uniqueness and a differentiated product. Developing such a common perception relies on continued communication, comparison with other technology, and is definitely time consuming.

*Expected find (EF2):* We expect a reaction on the supplier side on avoiding situations where the requirement of local content is highlighted.

The Brazilian market is commented upon as a market with high trade barriers including both tariffs on imported goods and on requirement of local content, so how we arrive at this expected find:

It is based on an argument starting at the point where the market position of a product in a niche market is established, and there is a common understanding between the provider and client on the product differentiation. With this common understanding, and the client's established need for the product, we expect the client to assist the technology provider with assistance, guidance, and access to exceptions relating to requirement on local content, and trade barriers such as tariffs.

*Expected find (EF3):* We expect the companies to be reluctant to spread their activity internationally, and expect their presence in Brazil to be limited to representation, marketing, sales and project deliveries.

This is because the ownership to the IP and the tacit knowledge on their product and services are vital to the different companies. Their present size and available resources requires strict regulation of the internal processes.



*Expected find (EF4):* We expect that one or several persons or institutions in the company's network functions as a intercultural bridge builder initiating and supporting the early phase communication and subsequent transactions between the Norwegian supplier and the Brazilian client.

We base this expectation on the discussion on intercultural management. Here we referred to the framework for the 'millennium manager' developed by Trompenaars and Woolliams (2000). Lewis (2006) and Estienne (1997) both describe the necessity of a reconciliation process or bridge between cultures.

*Expected find (EF5):* We expect that the companies will use already established network connections to expand their network into Brazil.

Johanson and Vahlne (2009) has the subtitle 'From the liability of foreignness to the liability of outsidership'. They advocate the expansion of the Uppsala Model with inclusion of the business network of the focal company in the revised model for internationalization. Rather than considering the foreignness of the new entrant and focal company in a new international market, it is important to consider to which extent the focal company is inside or outside the relevant business networks in the analyzed market (Johanson and Vahlne 2009). The character of different networks is discussed in Amdam (2009). Also governmental networks are identified as one of several networks the focal company might participate in.

*Expected find (EF6):* We anticipate that companies deeply engaged into delivering products and services close to the research frontier will be able to reach into the Petrobras organization using academic networks and/or researchers at CENPES.

Dantas and Bell (2009) show yet another dimension on the business networks, as they consider the knowledge network, knowledge exchange and the network participant's role in a continuous innovation process.

### **3 Research method**

#### **3.1 Purpose and principles**

Science has provided us with many instruments to increase human knowledge and explain the world as we perceive it. Some tools are better suited for specific tasks and our purpose of this chapter is to find the best tool for the job.

Indeed, the best place to start is to keep the purpose of the paper itself in mind in our selection. We have identified that our purpose is not to develop new theory but rather to apply established theory on a practical case. We are keen to identify through established theory what works and how IN can aid Norwegian companies and themselves to do more of that. This drives us towards methods that are suited for understanding and investigation rather than deriving at new explanations.

#### **3.2 Methodological selections**

In the debate of using quantitative, qualitative or indeed triangulation methods, the qualitative perspective seemed the most rational. The rationales being that the population in our focal group, the N participants, is small. This means that whatever statistical correlation we might find through quantitative research could not be propagated to a larger population with any degree of validity. As our ultimate purpose is to improve the services of IN, we needed methodology that gives us insight into the history of the internationalisation process and not figures that would tend to describe the current situation.

Our prime source of data is therefore the semi-structured interview. The structure is used to provide comparable data as the respondents are asked the same questions. However, the structure is loose enough to allow for follow up questions and pursuit of particularly interesting information that might arise during the interview. See the interview guide, Annex II, for the questions and justification for asking each of them. A further justification for using this method is due to the researchers' competence. John is used to conduct much of his work in dialogue with Norwegian SMEs and Jack is a former journalist.

We will use telephone as the communication medium for practical reasons. This is due to the respondents being widespread, even as far as Brazil. The other reason is that this allows us to set up telephone conferences with the two interviewers in

different locations in addition to a third location for the interviewee. Interviews with physical presence could have provided us with more insight and nuances through meta-communication, but time and money prevents this option.

Secondary written data sources within the IN and N domain have been useful for our understanding of the context of our research question. In particular, the report of Andersen (2012) of the IN Rio office, NCE: Brazil, R&D and the role of clusters, has given us background insight. Furthermore we have found the following useful: Damvad et al. (2011) *Evaluering av Innovasjon Norge* (translated: Evaluation of Innovation Norway), Norwegian Ministry of Foreign Affairs (2011) *Regjeringens Brasil-strategi. Nye perspektiver på et tradisjonsrikt forhold* (translated: *The Government's Brazil strategy. New perspectives on a relationship rich in tradition*), Rambøll Management (2011) *Evaluering av Innovasjon Norges uteaktiviteter* (translated: Evaluation of the foreign activities of Innovation Norway) and St. Meld Nr. 22, 2011-2012, *Verktøy for Vekst – SIVA og Innovasjon Norge* (translated: *Tools for growth – SIVA and Innovation Norway*).

We investigated the use of available statistics as a data source. We abandoned this track for two reasons. One was that we could not easily find good quality statistics directly related to our research question. In balancing our scope budget, we found that although spending time on gathering statistics could improve our numeric understanding of the background for the research question, it would not help to a large extent to answer the question itself. More resources would have to be available if this path was to be pursued.

BI offered the possibility of using internal resources to help us in our work. Although we were grateful for the offer, we found it difficult to define a separate part of the scope that could be outsourced. First of all, because we ourselves wanted intimate knowledge to all parts of the scope and were reluctant to lose in-depth knowledge to some parts. Secondly, we evaluated that the work and timescale needed to adequately involve someone else did not justify the possible benefits.

### **3.3 Interviewee rights protection**

Our research involves gathering of sensitive data. To ensure the rights of the interviewees and to enhance the quality of the research, the project has been registered and the data gathering has been approved by The Data Protection Official for Research (Personvernombudet for forskning, Norsk samfunnsvitenskapelig datatjeneste AS) with project number 34133. The sensitive data gathered through transcripts of the interviews will be available to the tutor and the censors, but will be deleted at the end of the project period. See also Annex IV Consent form.

The data presented will be anonymized. Our intention is to make this paper publically available unless considerations during the research force us to make it confidential.

### **3.4 Population selection**

There were 7 companies that signed up for N. It turned out that one company did not commit to the program after all. Hence there are 6 companies that have participated in the programme and have experienced the current contribution of IN and is the natural population to seek data from. Although the companies are somewhat diverse, it is probable that they will provide somewhat similar data as they have taken part of the same programme. Rather than deciding up front how many (or all) of the population data needs to be gathered from, we will evaluate during the data gathering if continued interviewing will provide only marginally new data and hence can be stopped.

As this population has all invested a lot of time and effort in the programme, it is likely that it will report that N has indeed contributed to the establishment of relevant and useful contacts. Although gratifying to IN, this does not help to serve the purpose of the paper, to improve the programme.

We will therefore also collect data through interviews of companies in the target group that have established business in Brazil in the oil & gas sector that have not participated in the programme.

It is easy to make the classic mistake where restraints in subject selection will lead to non-representative results for the full population. A possible way to reduce this

error would be to identify and interview companies that are within the target group of IN but have not participated in order to try to find out why. Our limited scope capacity prevents this measure. However, we are aware of this pitfall and our findings should also be viewed in light of this.

### **3.5 National and language perspectives**

The perspective of the research methods are that of being in Norway wanting to do business in Brazil. We are then making the classic mistake that when evaluating or describing foreign cultures and institutions, our own cultural context has a high influence on the result of how outside cultures are perceived. In this perspective it would be more objective and potentially more useful to apply a research context where the strengths and shortcomings of Norwegian businesses are as perceived by Brazilians being exposed to them. However, due to time and scope limitations the traditional perspective of inside to outwards is used.

We have debated, to the degree that we concluded once and then changed our minds when given more thought, whether the interviews should be conducted in Norwegian or English. Most, if not all, interviewees are native Norwegian speakers and therefore Norwegian gives the best premise for the interview communication. However, the interviewees must use English as their business language and therefore must have a high degree of proficiency. Some interviewees might not speak Norwegian and translations would need to be done into English. This incurs an element of translation error.

Although it is more work for the researchers, we gave priority to the consideration that the quality of the data will be best if the interviews were conducted in each interviewees' native language. Hence the interview guide is in both languages and possible errors from Norwegian to English translations are on our account. They should be limited as Jack's native language is English.

### **3.6 Perspective – experiment vs matched pair vs learning sources**

We are using the connotation of 'focal group' and 'control group'. This is somewhat misleading, as we do not consider participation in the Navigator program as an experiment undertaken by the focal group, with conclusions and results comparable to the conclusions and results of a control group.

First of all, we are comparing the experience of a set of companies still aiming at a presence in the Brazilian market, with experience of a set of companies with an established presence. The control group does not include companies that have decided to discontinue their effort in obtaining a market presence in Brazil. As such we are aware that they are not fully representative of the population.

Secondly, as the response from all companies implied, generating and developing a business network is a continuous process with a large set of interrelated activities. Hence, the data leads us to consider the focal group as being exposed to a supported process of increasing their business network, with the control group being a supplement and a set of other ways of establishing a business network valid in the Brazilian market. This will enhance our learning and provide more data for concluding recommendations for N improvement.

We have sought companies for the control group that are comparable in size, technology, turnover etc. This was not easy. There are not that many established SMEs in the oil and gas sector established in Brazil to choose from. The Norwegian presence is dominated by the larger companies. Our search, spending reasonable resources, had connected us to three companies that are similar to our focal group in various ways and links. That means that there is not a matched pair with 1:1 comparison between one company in the focal group with one company in the control group. However, as our design is meant to use the control group for additional learning purposes and not a direct comparison, we find this approach justifiable. If more resources were available, even more effort could have been put into requiring more companies in this group to widen the knowledge of different possible entry approaches.

To make sure we are comparing the same phase between participants and non-participants and given that non-participants also have reached different stages in their entry, we will state the following to non-participants:

*We would like you to think back to the year, or year and a half leading up to the decision to move forward towards the Brazilian market.*

Viewing the scope as a whole, we expect the data to narrate varied histories of developing a business network enabling business operations in Brazil and we therefore expect the data to be reasonably valid.

### **3.7 The small sample dilemma**

We have restricted our sample and data background along several axes. We have decided to limit ourselves to the Brazilian sub-market of the global oil and gas market. And we have limited the focal group to be a set of companies participating in one of the Navigator projects undertaken.

At the same time, having in depth and semi-structured interviews with the informants, we hope that they will provide us with a good understanding of motivation, process and expectations for each of the companies involved in the interviews. Having a larger sample might have produced a more differentiated picture. But a larger sample must lead to a more shallow discussion with each company.

### **3.8 Eye of the beholder**

The full literary quote generally used is “Beauty is in the eye of the beholder”. The indirect statement is that beauty is a subjective quality. Our aim is to increase the quality of this paper by acknowledging our subjective perspective and being aware of how this can colour our evaluations and, much worse, lead us to produce false data. We have borrowed the philosophy from risk analysis of identifying in advance the potential risks, although not used the full method implication of quantifying the risks (and opportunities) and their likelihood of occurring. This has led us to the following:

John has been an intricate part of the IN Navigator Petroléo é Gas Brazil project based on the N programme outline. He has a passion for this programme and its continuation which can lead to overly favourable evaluations of it and its elements.

The established relationship poses several risks apart from that the subjective element is strong. First of all, IN is valuable to Norwegian companies both through competence and inexpensive services in addition to pure funding. You do not bite the hand that feeds you, which can lead to our sources being reluctant to criticise IN. This is particularly the case for previous participants who are hoping to gain more from IN in the future. We can link this to the well-established Chinese system of “guanxi”, which in layman’s terms can be described as “I owe you one”. (“You” in the guanxi contexts also meaning someone in our

network/group and “one” meaning for example a favour, support or in this case, favourable reference). However, in John’s experience, the feedback from the involved has been very direct and honest so far, and the directness is communicated as part of IN policy in the programme. The Norwegian culture is indeed direct and open compared with many other countries. We must nevertheless be aware that our investigations will involve also Brazilian culture which is a higher context culture. (Hall and Hall 1990, referenced in Browaeys and Price 2011, 283)

The above chapter is not meant to discredit John’s evaluations. It is debated to show that we are aware of these risks and therefore have a better chance of identifying them during the course of our work if they should appear. John’s intimate knowledge of facts also provides the benefit and opportunity of being able to arrest a false statement during an interview, or at least incorporate the fact that the interviewee is speaking against better knowledge in the analysis phase. Jack is much more likely to be duped in this respect, but has the advantage of the more objective outsider’s view. We’ll come back to this in the analysis chapter.

However, the above made us choose both to be present during the interviews, as is good common research practice, but with Jack conducting the core interview after introduction by John.

## **4 Analysis and discussion**

### **4.1 Introductory remarks – presentation of the companies**

We interviewed representatives from management in 9 different companies. Six of the companies participated in the Navigator Petroléo é Gas Brazil project, the focal companies; while three companies have established business activities in Brazil without participating in the N programme, the control group. Two of the companies in the control group have established subsidiaries in Brazil, while one is represented by their project manager recruited from the head quarter in Norway.

Code	Position of interviewee	Industry sector	No. of employees	Turnover 1 000 NOK
A:	COO	Subsea equipment	11	65 783



B:	CEO	Processing facility equipment	31	34 192
C:	CEO	Processing facility maintenance	31	47 823
D:	CEO	Maritime equipment	132	128 457
E:	CEO	Software	10	13 048
F:	CEO	Software	18	12 369
G:	CEO	Inspection services	127	280 069
H:	CTO	Software	7	8 111
I:	Founder, board member	Software	24	78 287
I2:	Founder, previous CEO			

Number of employees and annual turnover are drawn from the annual reports of 2011 of the Norwegian company as reported to Brønnøysundregisteret.

All companies, both in the focal group and in the control group, have received support from IN during their development. As John is employed by IN, information on the companies' strategies and business models has been available and has to some extent been used to deepen the interpretation and the analysis of our observations.

There is a time gap of approximately 8 months from the last company meeting in the N programme to the time of the interview. Three of the focal companies (B, D and E) have established commercial relations with Brazilian entities in the meantime, while the three others are still following up on leads. None has so far decided to postpone further involvement with the Brazilian market.

Two of the companies from the focal group are delivering services and products based on software, similarly to two of the companies in the control group. Three companies in the focal group are providing equipment, and the last one is providing maintenance services on processing facilities. One of the companies in

the control group is offering inspection services. For the focal companies in the software products and services sector, we consider the control group representatives as highly relevant, and there is a set of matched pairs in the two groups. The company providing maintenance services can be matched with the inspection company, and we consider this company from the control group also fairly representative for the equipment providers.

We conclude that the focal companies and the control group make out a set of matched pairs.

This section of the paper is split into four parts, including this. In section 4.2, we will present part of the observations as it follows from the interview guide and the questions raised there. Section 4.3 will analyse the observations relative to the theories and the expected finds. Section 4.4 summarizes the finding from the analysis from the data and observations.

## **4.2 The Interviews**

In this section we follow the outline of the interview guide and present observations extracted from the interviews.

### **4.2.1 Questions 1, 2, and 3; Establishing connections**

In Questions 1 we asked for the number of contacts in Brazil listed in the sequence of importance:

Company A: 1: IN Rio; 2: (subsea equipment supplier), we have collaborated with them earlier; 3: Representative of (subsea service provider) that has representation in Brazil, 4: Brazilian representative of (marine supplier), 5: General Manager of (equipment supplier) in Brazil.

Company B: In principle, we are connecting to the same MNC's we are visiting in Norway, i.e. the major EPC-contractors, Aker Solution, FMC, Subsea 7, Oceaneering, and so on.

Company C: 1: IN Rio are the most important. Especially in providing access to potential clients and initiating meetings. Also in relation to potential collaborating partners. As door openers they have been very important to us, 2: The research institution CENPES, much used by Petrobras. Petrobras has gained information about us also through them; 3:

We have also received support from INTSOK (IS) in Brazil. We are members there.

Company G: The JV partner is the most important “contact” for the company. (The JV partner is a Brazilian company staffed primarily by Scandinavians). We represent a safe harbor for companies desiring starting up and running their business in Brazil initially. We offer companies like Company G and Company H and about 30 other companies not only advice and setting them in connection with possible partners. We help people implementing and are legally responsible for our clients and possible customers in Brazil.

In the table below, we summarize the data on number of contacts for all the companies.

In Question 2, we ask the interviewees about how these contacts were established.

Company B: IN Rio made a visiting list based on our wishes early in the project.

Company C: We had a call asking for our interest (in N) from the programme. The connection to CENPES was established via IN Rio. The connection to INTSOK was established through the country visits.

Company E: A co-founder of the company, prof. X at NTNU, initiated a contact with IN Rio de Janeiro. . . . He is also a key player in the (NN) – conference, an international conference running every year in October here in Trondheim. He invited the two Petrobras connections (Y and Z) mentioned earlier. We met during the conference and prof. X established meetings here at Company E. It is through the dialogue with Z, that we have reached the present stage.

We were invited to participate in the N programme about the same time as the meeting with Z. Coinciding of timing was important.

The interviewers made a revised question to company H:

Interviewer: If you could take us back to the period before the first contract with Petrobras and give us a brief walkthrough of the processes

leading up to that contract. Also indicate which contacts were important in the process.

Company H: The real originating source of our serious association with Brazilian oil industry and Petrobras in particular came through Brazilian – Norwegian university association.

(We have included more from this reply under the analysis of importance of business networks.)

In Question 3 we asked the respondents to characterize the contacts as being person to person or official:

Company A: My boss has never joined me in Brazil, even though he participated in several meetings (in Norway). The responsibility of the project has been on my shoulders. We are not a very big company. I cannot guarantee that it had continued if I had to resign. It is I who has the connections and knowledge and can obtain a closer collaboration with us. If I quit, I should make a thorough introductory round of my successor.

Company E: The relations are both personal and professional. The personal part is pretty important in such relations, but the relationship has always been an official. I have always been the official representative of the company during meetings with those representing their company. At the same time, there has been a strong dependency on the persons involved.

We have passed the point where I was the contact person. I have emphasized the transfer of the contact to two other colleagues here. That was done during the project kick-off.

Company H: There is absolutely both a personal and a business professional side to all of the relationships. I think it is important in Brazil in particular. If you feel comfortable in inviting them home, that they feel comfortable in inviting you out. They have a very social and a very personal culture. Norway is a little bit reserved and I think a little bit stifling for Brazilians who end up in Norway.

In the table below, we have summarized the response to questions 1, 2, and 3:

Code	No. of contacts	Origin	Type
A:	5	Previous business associates	Personal
B:	4	Previous business associates	Professional
C:	3	Navigator	Personal
D:	2	Previous business associates	Personal/professional
E:	3	Academic connections	Personal/professional
F:	1	Agent, through IN Rio	Professional
G:	1	Agent	Professional
H:	2	Academic connections	Professional/personal
I:	1	Academic connections	Professional/personal

Interviewee I2 gives an interesting picture on how important connections are identified and contact established. The connection is a Petrobras employee referred to as NN:

- \* IN Rio identified NN as an important person for Company I and Company I's marketing effort in Brazil
- \* Company I met NN during a professional conference in Houston where both Petrobras and Company I made presentations of papers. Company I's representative used the opportunity to initiate contact and dialogue with NN.
- \* Later contacts and dialogue with DnV, partly in Rio, partly in Oslo, confirmed NN as an important person in Petrobras regarding formulation of specifications and requirements from Petrobras with this actual field of working.

I.e. several persons identified and confirmed that NN was centrally placed in Petrobras for Company I. Furthermore: Through an internship arrangement between NTNU and Company I, the company recruited several Brazilian students for their office in Trondheim. When NN during a business visit to Finland had time to spare, Company I managed to get him to spend time in Trondheim for a longer presentation of their technology and company. They had the opportunity to introduce one of their Brazilian employees, who more or less took over the

meeting and gave the complete presentation of the company and the technology in Portuguese. NN obtained a deeper understanding of the technology, and the opportunity the technology provided to his field of expertise and responsibility in Petrobras. Company I does not hesitate to characterize this visit and this meeting as their major breakthrough towards Brazil. Through the contact with NN, Company I was also introduced to a set of other clients in Brazil.

#### **4.2.2 Questions 4; Possible remedies to improve the Navigator programme**

On this question, related to possible tools and remedies, Company C, D and F have widely varying replies:

Company C: I am thoroughly satisfied with the support we have received from IN, and I we arrived at conversations and meetings with those we wanted surprisingly fast, based on our priority list and wishes. We have received the help we needed. As long as we are that satisfied, we haven't considered what could have been done better. IN were very responsive.

Company D: We could have done the marked job ourselves. We might have reached a commercial contract earlier, but then we would also had to take a higher risk.

Company F: IN Rio was given a list specifying the type of people we meant we should talk to at Petrobras. IN Rio was not able to crack this code. This contributed towards that we quickly decided to try a local management-for-hire company.

Overall, the feed-back from the interviewees on this question does not constitute data of sufficient quality for further analysis as there was little information to be collected.

#### **4.2.3 Question 5 and 6; Obstacles, barriers and remedies**

On question 5 regarding obstacles and barriers, the response covered a fairly wide range.

Company A: Having sufficient time for it. In a little organization as our's. I have a lot of other tasks in addition. The Brazil effort had a tendency to lose in the day-to-day prioritizing battle.

Company B: Local content. It was a political one-way-speech on which demands they had.

Company D: Things has taken a lot of time. Decision processes are long. The other challenge is local content.

Company E: I anticipate restrictions such as taking money out of Brazil, strong demands on local content, very high import barriers and a large bureaucracy.

In summary, the following barriers and obstacles are identified:

- |      |                       |                       |
|------|-----------------------|-----------------------|
| i.   | Local content:        | Companies B, D and E  |
| ii.  | Bureaucracy:          | Companies A, G, and E |
| iii. | Elapsed time:         | Companies A and D     |
| iv.  | Internal priority:    | Companies A and C     |
| v.   | Language and culture: | Company G             |
| vi.  | Trade barriers:       | Companies C and E     |

Shifting perspective back and looking into strategies and tactics employed to evade or overcome these barriers: The replies were again wide ranging but can be summarized into three main strategies:

- |      |                   |                            |
|------|-------------------|----------------------------|
| i.   | Patience          | Company A and H            |
| ii.  | External support: | Companies C, D, E, G, H, I |
| iii. | Avoid the barrier | Company B                  |

In strategy ii, External support, we include support from agents, JV-partners, and membership in INTSOK.

#### **4.2.4 Question 7; Non-participation and overall evaluation**

Finally we asked the interviewees, what would have been the situation if they had not participated in the N programme, and how would they evaluate the investment in participation:

Company B: We would probably have done something versus the Brazilian market, as it is a very interesting market the coming 10 years where there are extremely large potentials right outside the Rio area. At some point or another, we would have done something versus the Brazilian

market, but when the N programme came strolling along to us, we tagged along it as it was convenient and practical and more or less just what we would have done ourselves. So we had help and support in that regard.

Company C: Then it (the Brazilian market) would not have been on our minds at all. I remember when we were contacted and asked to join the N programme and Brazil. We had a lot of mental barriers, and thoughts about that we still have so much left to do in the Norwegian market that Brazil was not a market we should not look into yet. But then we participated in the first network meetings, and several barriers were broken there, so we re-decided and said OK: Let's give it a shot, and if we should not succeed, we will at least have valuable experience useful on a later occasion. Whether it be towards the British market, continuing on Brazil or other markets. Regardless of success in this run or not, we will have gained valuable experience.

Company A and C admits that the Brazilian market would have been outside their attention, while company B, E and F gives the N programme credit for increasing the priority of the Brazilian market during the programme execution time.

Company D has an interesting response to the hypothetical question:

Company D: We would have continued delivering our products as we have done before, but we would not have the qualifications to evaluate the risks involved. Even though we do not have the direct client contact, as our partners take the market responsibility, we have a certain understanding of the requirements and how the (business) environment operates. It has been very useful for us, because we may offer a certain added value which has helped our partners in the market. For us it has been useful to obtain an overview and have insight into what is important in Brazil.

### **4.3 Comparison between the referred theories and our observations**

As discussed earlier, we are primarily looking towards the theories and scientific work to have a theoretical approach to the interpretation of our observations, and



to see whether our observations from Norwegian SMEs match theories based on international MNEs.

We concluded chapter 2 with a set of six expected findings based on the three theories we discussed as relevant for the paper. We will in the following sections discuss to which extent our observations meet these expectations.

#### **4.3.1 Global expansion theory**

*EF1: On elapsing time and patience*

In section 4.2.2, companies A and D identified elapsing time as one of their identified barriers. Company A made an interesting observation in this context:

Company A: They (the Brazilian Navy) have continued focus on large (product), while we deliver smaller, electric (product). The big ones may easily be replaced by smaller. It is about turning their way of thinking. They are lagging behind on how we do this in Norway. The ideas of doing operations differently are often thought of up here, and then it may take some years before the same idea arrives in Brazil.

In addition Company E commented on time spent and patience:

Company E: Believing that you can just send an e-mail and expect a response does not work very well. We discovered this very quickly. We worked through telephone meetings and had in this way some progress every month. It worked well but indeed, it took time.

Interviewer: It took months as you said earlier, were you waiting for the Brazilians, or did they have to wait for you?

Company E: We have waited a lot for the Brazilians, but things could have moved quicker by us as well. But summarizing on the one and a half years we are talking about, we might have saved one month. We could not have done much more. I believe in a strategy with a solid dose of patience during discussions and processes with Brazilians. At least our experience indicates this.

The observation of elapsing time is also commented upon by company H, which is in the delivery phase of a project:

Company H: ... from a work point of view, there is a large difference in engineering efficiency rate. It can be very frustrating. It goes at a pace with a lot of talk. There is a huge amount of communication going on and much less getting your hands dirty work going on. Work requires a lot of words. That is different from Norway.

We conclude that we did find comments on elapsing time and time consuming processes in our material. It is partly explained through different work attitude by the interviewees, but the theoretical explanation is also indirectly confirmed by company A, i.e. it requires time to establish the common understanding of the differentiated product and its applicability.

*EF2: On Avoiding trade barriers and low trade barrier expectations*

As already mentioned in section 4.2.3, company B indicated that they avoided markets where local content were significant:

Company B, on local content: This is particularly valid for the top-side market. Going into the subsea world, it was not relevant for them (the clients) at all. There are no such (subsea graded) products in South-America, so in layman's terms: the requirement is there, but it has no practical relevance were the EPC-contractors have no other options. For commodity products it is relevant, for speciality products it is not relevant.

Whenever the requirement of local content is used, we find the Brazilian market negligible (for the commodity product). We concentrate on the subsea market. We need fast pay-back on our activities.

Section 4.2.3 also concluded that only company C and E identified trade barriers as a potential problem. The other companies identified other barriers for the expansion into the Brazilian market as more significant.

*EF3: On limiting key activities and protecting IP*

Although not explicitly a part of the interview, we observed that the companies are looking at the Brazilian sub-market primarily as a large and important market for their products and services. They follow the market and market leads in order to extend the scope of their activities. None of the focal companies were primarily

looking towards Brazil for placing manufacturing, research and development, or in other ways internationalise their internal activities. Also for the companies in the control group, their Brazilian activities are focused on marketing and representation, and execution of agreed delivery projects.

Company A: It is currently not an option for us to establish a local unit in Brazil. We are looking into the option of finding a partner. We are considering having local production in Brazil of parts of our product. We are more skeptical to outsourcing production of the control units. This part is unique. This is the knowledge we haven't found in Brazil.

One of the companies, Company F has engaged in a management for hire agreement with a Brazilian partner, and they consider this alliance as a first step towards a more formal engagement, probably a Joint Venture.

Company F: After a presentation by a Brazilian based company staffed by Scandinavians, we met with a cracker-jack Danish guy. He had a very nice way of approaching new people, very open. He gained our immediate confidence. He managed to quickly show us that he had good control of what was going on. The chemistry was in place very quickly. He spoke Portuguese as a Brazilian, English, Danish and Norwegian. He knows Norwegians. It was easy for us to select them to represent us in Rio.

We achieved the understanding through the N programme that working in Brazil is something that takes time and is relationship based. For us here in Trondheim, to learn Brazilian and get acquainted with the business processes there, ... In order to get some business out of this, we have chosen the agent alternative. They provide us with market intelligence, and they have network and access a lot of strange places. Petrobras is presently a client of ours, as of February this year.

Within the control group, two of the companies have made a FDI by establishing a joint venture with a Brazilian based company. The third company in the control group, company H, has signaled in other context that they are in a process of establishing an international alliance with a large, US-based MNE. This alliance will also have an impact on their *modus operandi* in Brazil.

None of the companies interviewed have established licensing of production as an entry strategy into the Brazilian market.

These findings are completely in line with what the theory indicated as expected findings.

### **4.3.2 Intercultural management**

#### *EF4: Culture Bridge Builders*

Several companies in both the focus group and the control group commented on the support provided by IN Rio. With a mixed staff of Brazilians and Norwegians they are indeed a cultural bridge builder.

The clearest indications on the accepted need for cultural bridge builders are company F's agent agreement, and company G and I's JV-agreement with their Brazilian partner. Company G commented upon this need as follows:

Company G: Communication is an interesting aspect. A company aiming at entry into Brazil will often experience the client as extremely positive, and we want to believe in Santa Claus. However, there is a grand difference between positivity and a PO (Purchase Order). You may have to wait years for a PO, whilst having a lot of positive meetings. It is a challenge to bridge the communication gap and understand the intention of the prospective client. And the entry company may find itself in a tight corner with personnel in Brazil having communicated back to head quarters (HQ) about full speed ahead, investments are calibrated and made accordingly, but the sales are on hold. This will become awkward and difficult both for HQ, defending the investment toward the board of directors, and for the personnel on the ground in Brazil needing confidence and trust at HQ.

Identification of persons acting as cultural bridge builders was not part of the Interview Guide; hence we have only circumstantial comments on the need for such services. However, with this constraint in mind, we find that our material confirms the need for such services.

### **4.3.3 Network theory**

#### *EF5: Network expansion*

Coviello's (2006) observation of business networks as existing prior to and being an integral part of internationalisation, is confirmed by our interviews. As given in earlier quotations, focal companies B and H reports that their most important business relations with the Brazilian market are extensions of their existing business networks in Norway.

Company A, B, and D commented on the expansion of their business networks towards their potential business network in Brazil:

Interviewer: You mentioned Subsea Valley, is this a useful forum for initiating business contact relating to the Brazilian market?

Company A: Company A: Yes, absolutely. There are several of the companies that have established presence in Brazil that are member in Subsea Valley. We are pretty close to FMC (in Norway), who is substantial in Brazil. However, the connection must be introduced by others (than me). But I wouldn't have any problems of getting support from them (Subsea Valley members) in introducing me.

Interviewer: Can you think of what it would take to establish these contacts quicker or more effectively?

Subsea Valley accelerates the network. We have membership meetings where we meet companies and people more often than previously. We are staging a Subsea Valley exhibition and conference that I shall participate on right now. Top lecturers. 160 exhibitors. This is a super arena for building networks. The major companies are important for the SMEs to provide support.

Company B: We are on the reference lists of the companies (MNC) residing in their global knowledge network. It is essential to show that we have provided similar services and products to similar projects in the North Sea, the coast of Australia and the coast of Angola.

Company D: It (the relations) came into existence as we had deliveries to the partners in Norway. As they developed an increased global focus, we have been allowed to piggy-back on their expansion and continue to deliver to these groups in their new markets.

*EF6: R&D companies reaching Petrobras through academic networks and/or CENPES*

Company E, H and I are using an entry strategy where they expand their network through the international academic network. With reference to Dantas and Bell (2009) they are positioning the companies to become partners in Petrobras' innovation system. They are both heavily involved with CENPES and with universities in Brazil which are closely connected to Petrobras.

Refer to section 4.2.1 for company E's observation. Company H provided even more insight into this process of expanding business networks:

Company H: The real originating source of our serious association with Brazilian oil industry and Petrobras in particular came through Brazillian – Norwegian university association. Professor NN. at NTNU who spent 2.5 years in B just prior to becoming professor at NTNU in 1979-1981. He established close association with the Petrobras engineering infrastructure at that time. Those people are of course now decision maker in Petrobras 30 years later. The second person from Petrobras that he knew well and took his doctors degree, I think it was the University in Bergen, in drilling subjects. He invited professor NN to come to Brazil about 6-7 years ago and make a presentation at a conference related to new technologies in petroleum engineering.

... this seemingly casual university association, but in reality the contact building, the person building of people who later become decision makers. People here, people from us going there I think made all of the difference. And I think it has succeeded in allowing Company H to avoid this very frustrating difficult get-your-foot-in-the-door that most Norwegian companies have suffered in getting into Brazil.

This statement also confirms Coviello's (2006) observation of business networks as being established and developed even before the company is established.

#### **4.4 Validity of the observations relative to the research question**

The interviews have been undertaken in order to provide a basis for discussion of the research question. In this section we will discuss the validity and the quality of our observations in order to validate the coming conclusions.

##### **4.4.1 Openness and honesty in the interview situation**

In the discussion of methodology, several pitfalls were discussed. One of these was the fact that John is still employed by IN, and that this may pose a dilemma for the respondent. Our meta-observation from the interviews is that they were undertaken in an open and friendly atmosphere where honest answers were given to all questions raised. All respondents reacted positively on the information that we were working on an executive master's degree. Most of them expressed a wish to read the final paper.

John has followed both the focal group and the control group companies for an extended period, longer than the N programme, and he finds that the remarks and contributions in the interviews are consistent with the different companies' actions outside the interview situation.

The decision of Jack undertaking the interview is considered vital, both as he could plead ignorance and follow up on responses that needed clarification, and by establishing a report with the interviewees without linkage to IN.

In one instance we found the need to conduct an additional interview with a different person in the same company as John knew there was more to the story than the original interviewee provided. However, this was not due to lack of honesty but due to a change of personnel.

We consider the information and viewpoints made during the interview as valid and representative of the interviewees' honest opinion and evaluation.

##### **4.4.2 Prior knowledge, roles and bias**

Our expectations of the influence of our roles and background outlined in chapter 3 were shown to be valid. John's intimate knowledge of IN did indeed provide insight and corrections that would have been lost to Jack. This somewhat impedes the repeatability of our study. However, this could be compensated by doing a lot more work on understanding the history, background, institutional position of the

programme and the companies themselves. We had this “for free”. On the other hand, Jack was especially keen on pointing out negative findings as he was aware of his role as a watchdog for spotting a positive bias.

#### **4.4.3 Number of interviews of focal group**

On the onset, we did not know how many of the six in the focal group we would interview. We saw clear indications on repetition in the stories told by some of the companies. From this, we believe that the sample provided sufficient width to encompass the different experiences available. However, we ended up interviewing all of them as it was highly interesting and educational in itself and that we wanted to make sure we exhausted the sources to counter possible criticisms of falling short in our data gathering.

#### **4.4.4 Person to person vs personal**

With regards to question 3, we sought information as to whether the contacts are regarded as a person to person or an official relationship. The background was the assumption that personal relationships are very important in business relationships with Brazilians. In an overall perspective, our findings were distributed all along the axis of person to person versus official relationship. Our conclusion can therefore be no different, ie. that personal relationships are important to some and not to others.

We realize that there are several nuances to how the word “person” was perceived by the interviewees, especially how much of “personal” in the meaning of friend or private was interpreted. In addition, there are nuances of the meanings of these words between Norwegian and English. This paper is in English whereas most of the interviews were conducted in Norwegian. As a result, the possible depth of interpretation of these data is limited. If one were to look further into the personal aspect of the relations, perhaps the following phrasing could have given more clearly distinguished data: “Imagine you changed job to a totally different field. Do you think this contact would stay in touch with you?” Although the mesh of this filter is perhaps a bit too dense, it would distinguish if the Brazilian contact had included the interviewee as a member of their trusted and relied upon network for the future or not. Our interpretation of the data leads us to believe that at least some of the interviewees would answer yes to such a question.



#### **4.4.5 More sources**

We did not manage to get hold of the seventh company that did not commit to the programme after having signed up. Rather than speculating of the reasons why they dropped out, we conclude that we lost a possible source of understanding why they did not fully commit.

IN B is heavily involved in the programme and is also a resource for others in the control group population. Interviewing the employees in that office would most likely have brought even more valuable insight. However, this loss is somewhat compensated by the fact that this paper will be subject to review and debate within IN, also by the office in Rio.

During the research period, John participated at a conference including several of IN's key people in the FRAM Market programmes. Although a potential good source of data, the time limitation at the conference reduced John's opportunity to provide a teaser about this paper only, not to discuss its core.

### **4.5 Summarizing the analysis and discussion**

In this chapter we have presented, analyzed and discussed an extract of the interviews with nine companies aiming at an entrance to or having entered the Brazilian sub-market of the global oil and gas market. The interviews have provided us with the narrative stories of expectations, motivations and experience of Norwegian SMEs aiming at a presence in the Brazilian market.

The observations made are in line with several of the theories presented initially. The basis for this branch of research is to a large extent the activity and experience of larger MNEs. Our data show that also Norwegian SME's can use these results when evaluating their own options.

We conclude that the data and the observations, with the outlined research limitations in mind, are considered a valid basis for the discussion of our research question.

In the Chapter 1 Introduction, we argued on the importance of access to business networks and international contact for Norwegian SME's aiming at an entry into a foreign market. The discussion ended by posing the following research question for the paper:

“To what extent does the N programme establish or provide access to relevant and useful business networks and contacts for Norwegian companies planning an entry into the Brazilian market?”

A range of observations can be made from the interviews with the whole set of companies. Let us first look into the development of their business network:

- i. All companies within the focal group used the N programme to expand their business network.
- ii. Only two of the companies in the focal group relied solely on the N programme to establish the set of useful contacts.
- iii. The majority of the companies had already, or used the N programme period, to mobilize established networks in order to obtain introductions to relevant contacts in Brazil.
- iv. Three companies used their position, or key employee’s position, in the academic society to get access to key players and actors in Petrobras and/or CENPES. Several of these connections were established prior to the initiation of the companies.
- v. For the majority of the companies, the connections made in Brazil were considered a mix of personal and professional relations. Most companies underlined the personal aspects during the initiation phase, and also emphasized the trust-building component of the contact development.
- vi. So far only three of the companies in the N group have received purchase orders or project contracts with clients in Brazil. One of the companies in the control group made a point that although they started their entry into Brazil in 2009, their first PO was not signed until five years later. Several companies commented on the necessity of being patient and building trust during the entry period into Brazil.

There are other components in participation in a project like N that several companies commented upon:

- i. The external setting of milestones and established meeting points, made prioritizing the project important and possible. The reporting to the group of what had happened since the last meeting was considered by several as an

important explanation of the progress and systematic approach to internationalization.

- ii. Several companies also commented on the transferred knowledge on how to approach the Brazilian market, and the applicability of this knowledge when they approached other international markets.
- iii. Most of the companies commented upon the necessity of patience in approaching the Brazilian market. One of the companies indicated that the N programme should consider having a follow up action aimed at reporting back to the group of colleagues on progress and difficulties in order to maintain the motivation and drive experienced during the N period.

From the above observations, we can deduce that participation in the N programme induced a priority on network development aimed at the Brazilian market. All companies acknowledge the necessity of building trust and establishing good relations with key persons in the possible client organisation.

#### **4.6 The observations and the research question**

There are two ways of answering the research question:

Alt. 1: The Navigator programme does not establish nor provide access to relevant and useful business networks and contacts for Norwegian companies planning an entry into Brazil

Alt. 2: The Navigator programme establishes or provides access to relevant and useful business networks and contacts for Norwegian companies planning and entry into Brazil to a certain extent.

Alt.2 can of course be modified by using different level of the extent.

As can be seen from the control group, they have established networks and contacts without the support of the N programme. Almost in parallel Company F decided to go to private company in Rio in order to establish their network. Three companies in the focal group used their existing network as seed and starting point to extend their network into Brazil. One company used established academic network to initiate the connection to Brazil, leaving only two companies relying solely on the N programme to initiate their business network in Brazil.

On the other hand, the majority of the focal group companies commented upon the prioritizing effect on participating in the N programme. Both companies B and E, as examples, stated that they would have done something on the Brazilian market, but as they joined the N programme, they achieved a higher focus and the market obtained a higher priority.

The N programme is described in Annex III as a process. During this process the companies will have support from external resources in order to develop skills and knowledge. It is important to understand that the N programme is not a course, nor is it a service. The outcome of the process and the result for the companies are heavily dependent upon the active involvement of the companies, and their willingness to contribute themselves.

From this perspective, we will argue that the N programme establishes access to useful business networks through the imperative: Do it – Now. The companies are themselves the sources of information and knowledge, but it must be mobilized, and the N programme provides the priority and sense of urgency in doing it.

It is through this focused effort we conclude that participating in the N programme had a high impact on the companies' effort in developing the business relations with key players in the Brazilian market, and that our research question is answered according to a revised Alt. 2:

“The N programme establishes or provides access to relevant and useful business networks and contacts for Norwegian companies planning an entry into the Brazilian market to a high extent.”

## **5 Reflections and recommendations**

### **5.1 Reflections and bonus information**

The narrative stories of the companies interviewed contained much more information than what have been used in this paper: some vital, some humours, some 'war stories' to be told in jovial settings, and a set of comments that are definitely food for thought.

### **5.1.1 Power distance and discussion intensity**

The curriculum includes intercultural management, and reference is made to Hofstede's work. Company G made an observation directly into the theory of Power distance:

Company G: Stepping on someone's toes can create huge difficulties and make key personnel very uncooperative.

Interviewer: Is this connected to what in Asia is termed as 'loosing face'?

Company G: Yes, absolutely. In this aspect there are similarities between Latin-America and Asia. If you should, by accident, talk against a superior, which is a daily event in Norway... Even though the organization in principle and on paper has a hierarchy, you act as if the organization is flat and everyone can say just about everything to everybody, as long as you are civilized. Here the hierarchy is extremely strong. It goes both ways. Those high in the hierarchy are terribly sensitive on threat towards pride and status. Those low in the hierarchy are very afraid of making decisions and making mistakes.

On the other hand, a 'war story' from company H adds another flavor: Having a set of meetings with Brazilian personnel in the Norwegian office, the discussion ran 'a little intense'. The Norwegian colleagues outside the meeting were afraid of fighting and a blown contract, but it was a Brazilian tempered discussion in Norway.

The point for reflection is how to communicate and how to maintain a working relationship across cultural borders.

### **5.1.2 How to be represented?**

Company I gave us an insight into how they discussed whether to use an agent or a JV to represent them in Brazil:

Company I: Some other company sells a product and can easily identify when they have sold the system and then the agent shall have this fee. For us it is a more complex picture because we are selling services. ... I found that our process is complicated and very time consuming (five years). ... I expected we anyway would have needed to send some of our people,

specialists, over regularly before any sales were made, and then the assessment of who had sold the system would be difficult. In addition, the local content requirement would have made establishing a local subsidiary relevant, which again would pose problems towards an agent.

This observation adds a dimension into the rational consideration as to when to use the market place, i.e. agent, and when to make an FDI, i.e. a joint venture based on the control vs. investment evaluation.

### **5.1.3 Norwegian technology – signifying quality**

Company H: NN (the project representative in Brazil) has made this comment several times. Maybe it's because the people coming to Norway are very high level. The technology coming from Trondheim is much respected at university level. They have much respect for Norwegian technology and Norwegian universities. It is a big plus, it is not a negative, to be from Norway.

In chapter 1 we made a comment on the longstanding trade between Norway and Brazil based on commodities such as coffee and *bacalao*. This recognition of Norwegian quality is interesting for other Norwegian companies with ambitions in Brazil and offering advanced technology for the oil and gas industry.

### **5.1.4 Appreciation of IN Rio's work and services**

Six out of the nine companies mention IN Rio as one of their top three business contacts in Brazil. Several companies comment on the positive attitude and willingness to provide service.

Company I also made a chronologic review of IN's and IN B's contribution to the development of the company:

- \* Initial contact with IN Sør-Trøndelag through incubator grant.
- \* Followed up through financing of large Industrial Research and Development grant with a demanding oil company.
- \* Through company contact person in IN Sør-Trøndelag, the IN foreign office network was identified and mobilized.
- \* IN B oriented on the contact process in Brazil and they provided a good description on how Petrobras operates in this market.

- \* IN B also contributed in identifying a key person in Petrobras.
- \* IN Singapore took on coordinating role versus India, Malaysia, Indonesia and Singapore. This led to contract between ship owner and company I

## **5.2 Recommendations for further work**

There are also indications in the reviewed data and observations on tasks and recommendations for further work:

### **5.2.1 Business network development.**

Business network development is a huge field of work. Based on the work of Dantas and Bell (2009) there is a potential in continued discussion and research on the network taxonomy. In particular, extended research on the inclusion of Norwegian SME's into major companies' innovation system and network of research collaborators would be highly interesting as this is an entry strategy into a foreign market used by three of the companies interviewed in this paper.

Norwegian and Brazilian government has initiated and developed institutional collaboration between universities and research institutions in the two countries. We have three explicit references to this collaboration instigating collaboration between companies in the two countries. We hope our finds can convince the government on the importance of continued support for such international collaboration at an institutional level.

We believe that continued discussions between the IN representatives in Norway and abroad and IN's clients regarding business network development should be an integral part of the on-going business model discussions.

### **5.2.2 Intercultural management**

Although the vital Brazilian contacts are used to English as a business language, several of our interviewees have pointed towards a Portuguese speaking ally as important when communicating with the prime Brazilian contact. The language familiarity is probably beneficial for understanding and trust. Those embarking on a long term commitment in Brazil should consider learning at least some of the language and make an effort to learn about Brazilian cultural highlights and

even take an interest in football – a never ending topic of enthusiastic conversation.

### **5.2.3 Measuring success**

We have focused on network establishing as an indirect success parameter. Preferably it would be better to find objective success parameters for Norwegian SMEs business in Brazil. In line with the fashionable New Public Management for cost-effective public spending and Balanced Scorecards for performance monitoring, it is tempting to evaluate the success of FRAM Market programs through tracking of objective parameters such as: “Has the company established a Brazilian subsidiary” or measuring “The amount of revenue generated from Brazilian customers”. We would like to stress that one of the companies’ state that they found the N programme very useful in understanding the client’s client to better serve their Norwegian client in the Brazilian market, and hence help to create more value. However, the company would score zero in both the outlined parameters. Objective success parameters should be used with caution and patience as the time interval between cause and effect is long.

### **5.2.4 Recommended improvements for the FRAM Market programme**

During the fall of 2012 the programme was renamed from N to FRAM Market to signal the close relationship with other competence programmes offered by IN. We will suggest the following improvements and modifications to the programme, making the change more substantial and the programme hopefully more successful:

- \* Make network development a specific subject in the programme. In this context, one can recommend network extensions towards new markets based on local networks, in Norway, associations, clusters, and academic connections. All companies interviewed have identified this as crucial.
- \* Increased use of personnel from the relevant foreign office during the programme period. This is in order to provide better service to the programme participants through a deeper discussion on service specification, f. inst. preparing the visiting list of potential clients.
- \* Allowing resources to be available in the relevant foreign office after the formal project period in order to follow up on each of the companies, as



other tasks fight for priority in the post-programme period and in recognition that success takes time.

- \* Organizing a post-project meeting in order to maintain motivation and drive in the different companies, as suggested by one of the interviewees and as justified above.

Our data shows that several companies in the focal group had no prior strategy for the Brazilian market or had this as an option for the future only. We have concluded that the N-programme acts as a catalyst in this respect. Intrinsically, the marketing and targeting performed by IN offices is not discussed in this paper, but is indeed vital. Out of respect for the potential participants, the invitation should not come at the last minute.

Although this paper focuses on the IN N program, it should be noted that several interviewees mention that the efforts of their local district office, and also to some extent other foreign offices, have been beneficial to the companies' international success. However, one company expressed that their local IN office which recruited them to N was rather ignorant as to the content of the N program. Based on this, we see a potential for improvement of the communication and collaboration between the IN district offices, the IN foreign offices and FRAM Market is further nurtured and facilitated. Indeed, networking is probably just as important for IN as for companies seeking international success.

We believe that the FRAM Market program is a good programme for companies with ambitions and willingness to participate in a process aimed at international expansion. We also believe that by introducing more companies to the FRAM Market program, the IN representatives at the various offices, both in Norway and abroad, can influence the companies' focus and priority for an extended period of time.

## **6 Attachments**

- Annex I: Hofstede scoring
- Annex II: Interview guide
- Annex III: About the Navigator programme
- Annex IV: Consent form

## 7 References

- Amdam, Rolv Petter (2009) "The internationalization process theory and the internationalization of Norwegian firms, 1945 to 1980." *Business History*, 51 (3): 445-461
- Andersen Rune and the Innovation Norway Rio Office (2012) "NCE: Brazil, R&D and the role of clusters." *Innovation Norway Business Note*.
- Browaeyns, Marie-Joëlle and Roger Price (2011). "Understanding Cross-Cultural Management." *2nd ed. Financial Times/Prentice Hall*
- Carrington Peter J., John Scott and Stanley Wasserman (2005). "Models and methods in social network analysis, Structural analysis in the social sciences." *Cambridge ; New York: Cambridge University Press*.
- Damvad et al. (2011). "Evaluering av Innovasjon Norge" *Econ R-2011-036*.
- Dantas, Eva and Martin Bell (2009): "Latecomer firms and the emergence and development of knowledge networks: The case of Petrobras in Brazil." *Research Policy*, 38 (5): 829-844.
- Estienne, Marion. (1997) "The art of cross-cultural management: 'An alternative approach to training and development'." *Journal of European Industrial Training*, 20 (1):14-18
- Hall, Edward T. and Mildred Reed Hall. (1990) "Understanding Cultural Differences." *Intercultural Press* (Referenced in Browaeyns, Marie-Joelle and Roger Price 2011, 283)
- Hofstede, Geert. (2013) Downloaded information from [www.geert-hofstede.com](http://www.geert-hofstede.com) 2013.02.10
- Johanson, Jan and Lars-Gunnar Mattsson. (1991) "Interorganizational Relations in Industrial Systems: A Network Approach Compared with the Transaction-Cost Approach." referenced in Thompson, Grahame, Jennifer Frances, Rosalind Levacic and Jeremy Mitchell (eds) "Markets, Hierarchies and Networks : The coordination of social life," *Sage Publications*, pp 256-264

- Johanson, Jan and Jan-Erik Vahlne. (1977) "The internationalization process of the firm: A model of knowledge development and increasing foreign market commitments." *Journal of International Business Studies*, 8 (1), 25-34.
- Johanson, Jan and Jan-Erik Vahlne. (2009) "The Uppsala internationalization process model revisited: From liability of foreignness to liability of outsidership." *Journal of International Business Studies* 40 (9): 1411 – 1431.
- Khanna, Tarun, Krishna G. Palepu and Jayant Sinha. (2005) "Strategies that fit emerging markets." *Harvard Business Review*, 83 (6): 63-76.
- Lawson, Sandra and Roopa Purushothaman, (2003) "Dreaming with BRICs: The path to 2050." *CEO Confidential*, 2003 (12).
- Lewis, Richard D. (2006) "When Cultures Collide : Leading Across Cultures." *Nicolas Brealey Publishing*.
- Narayan, V.K. and Liam Fahey. (2005) "The Relevance of the Institutional Underpinnings of Porter's Five Forces Framework to Emerging Economies: An Epistemological Analysis." *Journal of Management Studies*, 42 (1): 207-223.
- Norwegian Ministry of Foreign Affairs 2011, *Regjeringens Brasil-strategi. Nye perspektiver på et tradisjonsrikt forhold*.
- Pelle, Stephano. (2007) "Understanding Emerging Markets: Building Business BRIC By Brick." *Response Books*.
- Rambøll Management 2011, *Evaluering av Innovasjon Norges uteaktiviteter*.
- Ryen, Anne. (2002) "Det kvalitative intervjuet – Fra vitenskapsteori til feltarbeid." *Fagbokforlaget*.
- Segal-Horn, Susan and David Faulkner. (2010) "Understanding Global Strategy." *Cengage Learning*.
- St. Meld Nr. 22, 2011-2012, *Verktøy for Vekst – SIVA og Innovasjon Norge*.
- Trompenaars, Fons. (2000, 29-33) "The practice of reconciliation." Referenced in Browaeys, Marie-Joëlle, Fons Trompenaars and Michael MacCulloch "Case

studies on Cultural Dilemmas : How to Use Transcultural Competence for Reconciling Cultural Dilemmas. " *Nyenrode University Press*.

(According to reference list in Browaeys, Marie-Joelle and Roger Price 2011)

Trompenaars, Fons and Peter Woolliams (2000, 21-28) "Competency framework for the millennium manager" Referenced in Browaeys, Marie-Joëlle, Fons Trompenaars and Michael MacCulloch (eds) "Case studies on Cultural Dilemmas : How to Use Transcultural Competence for Reconciling Cultural Dilemmas." *Nyenrode University Press*.

(According to reference list in Browaeys, Marie-Joelle and Roger Price 2011)

Wasserman, Stanley and Katherine Faust. (1997) "Social Network Analysis : Methods and applications. " *Cambridge University Press*

## Annex I Hofstede scoring

<b><i>Brazil</i></b>	<b><i>Norway</i></b>
<p><b><i>Power distance</i></b></p> <p>At a score of 69 Brazil reflects a society that believes hierarchy should be respected and inequalities amongst people are acceptable. The different distribution of power justifies the fact that power holders have more benefits than the less powerful in society. In Brazil it is important to show respect to the elderly (and children take care for their elderly parents). In companies there is one boss who takes complete responsibility. Status symbols of power are very important in order to indicate social position and “communicate” the respect that could be shown.</p>	<p>Norway scores low on this dimension (31) which means that the following characterizes the Norwegians style: Being independent, hierarchy for convenience only, equal rights, superiors accessible, coaching leader, management facilitates and empowers. Power is decentralized and managers count on the experience of their team members. Employees expect to be consulted. Control is disliked and attitude towards managers are informal and on first name basis. Communication is direct, participative and consensus orientated.</p>
<p><b><i>Individualism</i></b></p> <p>Brazil has a score of 38 which means that in this country people from birth onwards are integrated into strong, cohesive groups (especially represented by the extended family; including uncles, aunts, grandparents and cousins) which continues protecting its members in exchange for loyalty. This is an important aspect in the working environment too, where for instance an older and powerful member of a family</p>	<p>Norway with a score of 69 is considered an individualistic society. This means that the “Self” is important and individual, personal opinions are valued and expressed. Communication is explicit. At the same time the right to privacy is important and respected. There are clear lines between work and private life. Job mobility is higher and one thinks in terms of individual careers. The employer-employee relationship is based</p>

<p>is expected to “help” a younger nephew to be hired for a job in his own company. In business it is important to build up trustworthy and long lasting relationships: a meeting usually starts with general conversations in order to get to know each other before doing business. The preferred communication style is context-rich, so people will often speak profusely and write in an elaborate fashion.</p>	<p>on a contract and leaders focus on management of individuals. Feedback is direct and nepotism is not encouraged.</p>
<p><b><i>Masculinity / Femininity</i></b></p> <p>Brazil scores 49 on this dimension, really in the middle. The softer aspects of culture such as levelling with others, consensus, sympathy for the underdog are valued and encouraged. Conflicts are avoided in private and work life and consensus at the end is important. Status is shown, but this comes more out of the high PDI.</p>	<p>Norway scores 8 and is thus the second most feminine society (after the Swedes). This means that the softer aspects of culture are valued and encouraged such as leveling with others, consensus, “independent” cooperation and sympathy for the underdog. Taking care of the environment is important. Trying to be better than others is neither socially nor materially rewarded. Societal solidarity in life is important; work to live and DO your best. Incentives such as free time and flexibility are favoured. Interaction through dialog and “growing insight” is valued and self development along these terms encouraged. Focus is on well-being, status is not shown. An effective manager is a supportive one, and decision making is achieved through involvement.</p>

<p><b><i>Uncertainty avoidance</i></b></p> <p>At 76 Brazil scores high on UAI – and so do the majority of Latin American countries. These societies show a strong need for rules and elaborate legal systems in order to structure life. The individual’s need to obey these laws, however, is weak. If rules however cannot be kept, additional rules are dictated. In Brazil, as in all high Uncertainty Avoidance societies, bureaucracy, laws and rules are very important to make the world a safer place to live in. Brazilians need to have good and relaxing moments in their everyday life, chatting with colleagues, enjoying a long meal or dancing with guests and friends. Due to their high score in this dimension Brazilians are very passionate and demonstrative people: emotions are easily shown in their body language.</p>	<p>Norway scores 50 and thus becomes a fairly pragmatic culture in terms of uncertainty avoidance. This means that both generalists and experts are needed. There is focus on planning, and they can be altered at short notice and improvisations made. Emotions are not shown much in Norway, people are fairly relaxed and not adverse to taking risks.</p>
<p><b><i>Long term orientation</i></b></p> <p>At 65 Brazil places itself amongst the long term oriented societies as the only non-Asian society. The "jeitinho brasileiro" is really to look for alternatives to do what in a Western eyes could be regarded as impossible. Like Asians the Brazilians accept more than one truth. Brazilians easily accept change as a part of life.</p>	<p>Norway scores 44 making it more of a short term orientation culture. This is evident in that leisure time is important, absolute truths needed and there is concern for stability. Quick results are expected and there is a focus on the bottom line and people spend for today.</p>



## **Annex II Interview guide**

The discussion in the Design chapter has led us to choose the semi-structured interview as our prime data gathering method. This interview guide is therefore a basic outline only. All of the below questions will be put to all interviewees to make sure data suitable for comparative analysis are gathered. However, follow-up questions based on the responses will be asked in order to pursue particularly interesting or useful information.

The interview will start with an introduction of ourselves and suitable “small talk” in order to put the interviewee at ease and provide a comfortable and amicable atmosphere (Ryen 2002:129).

The interviewees have been given a written orientation with the outline of the nature and purpose of our research in order to provide them with enough information to reach an informed consent to participate in our study and to sign the consent form. See Annex V. The form was revised during the period (from interview 3 on) to include the research question itself. The research question was read aloud to the interviewees prior to the first question for the first three interviews.

The questions are stated below in both English and Norwegian to verify the quality of the translation, but only the relevant language is used during the interview.

*Q 1: In your work to enter the Brazilian market, we would like you to shortly list the most important contacts in Brazil that have been useful to you. Can you do so one by one in order of importance?*

*Q 1 N: I arbeidet med å komme inn på det brasilianske markedet, ber vi deg om å kort liste opp de viktigste kontaktene i Brasil som har vært nyttige for dere. Kan du liste dem en etter en i rekkefølge av viktighet?*

We intentionally do not specify “contacts” to mean person, institution or company in order not to disrupt their original perception.

We leave the interviewee to choose the exact number of contacts they list, but seek at least three and will stop them at five in order not to bloat the data gathering.

We then repeat each contact in turn back to the interviewee and ask the following:

*Q 2: In each of these cases, can you explain how these contacts were initially established?*

*Q 2 N: I hvert av disse tilfellene, kan du forklare hvordan disse kontaktene ble opprettet opprinnelig?*

Here we try to find out who (if any) was the facilitator for the establishing of the relationship or if it was their own direct approach or other routes. We expect the interviewees to elaborate on the history of the contact establishment by their own initiative. If not, they will be asked to do so.

*Q 3: Do you see these contacts as a person to person relationship or an official relationship that would live on if you or the other person were suddenly replaced?*

*Q 3 N: Ser du på disse kontaktene som en forbindelse mellom personer eller som en offisiell forbindelse som ville leve videre hvis du eller den andre personen plutselig ble erstattet?*

Here we try to verify our assumption that personal relationships are very important in business relationship with Brazilians.

*Q 4: Can you think of what it would take to establish these contacts quicker or more effectively?*

*Q 4 N: Kan du tenke deg hva som skal til for å etablere slike kontakter raskere eller mer effektivt?*

Here we seek guidance into possible tools or remedies that FRAM Market might implement to improve the service.

*Q 4.1: Are there particular Norwegian contacts you will point out that have contributed to the endeavour?*

*Q 4.1 N: Er det vesentlige norske kontakter du vil poengtere som har bidratt i satsningen?*

Here we seek information about possible Norwegian networks that have been beneficial.

*Q 5: Can you explain who or what have been the major obstacles in the pursuit of your goal?*

*Q 5 N: Kan du forklare hvem eller hva som har vært de største hindrene i deres arbeid for å nå målet?*

This question is designed to identify which barriers or difficulties they have encountered.

*Q 6: Have you had useful help in overcoming these obstacles?*

*Q6 N: Har dere hatt nyttig hjelp til å komme over disse hindrene?*

This follow-up question is designed to identify what (if any) outside help (persons, institutions, companies) has been beneficial. If the answer is yes, they will be asked to elaborate if they do not do so on their own initiative.

*Q 7: (Relevant to participants of the Navigator program only):*

*Imagine you had not participated in the Navigator program. What do you think would be your situation today with regards to the Brazilian market?*

*Q 7 N: (Kun relevant for programdeltagere):*

*Tenk deg at dere ikke hadde deltatt i Navigator-programmet. Hva tror du hadde vært deres situasjon i dag med hensyn til det brasilianske markedet?*

Although it is a hypothetical question and the answers are not verifiable in any way, we have included it to receive information if the participants think the program is fulfilling its purpose or not.

*Q7.1: Has the effort been worth the effort and the investment?*

*Q 7.1 N: Har innsatsen vært verd strevet og investeringen?*

This question relates to the overall and abandoned question «Is the program worth it?» as discussed in the chapter leading up to the definition of the research question. Although it is too general to allow for detailed analysis, it gives an overall perspective of the success of the program (or the general effort for non-participants) to further help answering the research question.

*Q 8: Is there something we haven't asked about that you think is important or relevant?*

*Q 8 N: Er det noe vi ikke har spurt om som du mener er viktig eller relevant?*

This question is designed to harvest knowledge that is important outside our line of questioning that could still benefit the purpose of the thesis.

## **Annex III About the Navigator Programme**

### **Background and History**

Around 2008 Innovation Norway initiated a competence programme aimed at Norwegian SME's considering entry into China. The programme was named NAVIGATOR. NAVIGATOR was an operative, multicompany competence service with high degree of internationalization. 8-12 companies participated in a development process lasting approximately 16 months. During the development period, there are 4-6 seminars each of about two days. At least one of the seminars takes place in the selected market abroad. In addition each company will receive between 40-120 hours of management consulting services to develop and implement the company's internationalization strategy. Specialist consultation can also be part of the programme.

During 2012 the programme was renamed from NAVIGATOR to FRAM Market to signal the close relationship with other competence programmes offered by Innovation Norway. Apart from the shift of name, no particular revision was done during 2012. There is at present (Spring 2013) an ongoing discussion within the IN organization about further development of the FRAM programmes in general, and FRAM Market in particular. It is our hope that the present thesis can contribute to this discussion.

The seven companies in the thesis' focal group participated in the project Navigator Petroléo é Gas Brazil in the period June 2011 to August 2012. We have hence referred to the project and programme as the Navigator programme, while our suggestions on improvement are directed towards the next generation, the FRAM Market programme.

### **Programme structure and content**

The Navigator programme shall contribute to increased competence, in particular within international business, informal network development and realization of market initiatives. There are a compulsory component in the programme, but the major part is adapted to the participating companies various requirements.

The Navigator programme is described as a supported process, distinguishing it from services and courses as the outcome are heavily dependent upon the active participation and contributions of the participating companies. This is both signaled during the initial presentation of the programme. Furthermore, during the first company meeting, all participating companies sign a non-disclosure agreement in order to provide an area where experiences and concerns can be easily and freely discussed between the companies.

The Navigator project process starts with a situation analysis for each of the participating companies. The objective is to clarify the managements own situation, and to expose the company's improvement and development potential under an international perspective. This analysis is also the basis for the action plan describing the changes and development projects the company shall undertake in order to become an actor in the projected market. This action plan shall be completed

within the 16 month Navigator process, and again – progress and progress reporting is the responsibility of the individual companies.

Innovation Norway has recruited an external nationwide team of project managers and management consultants. In addition to higher education, they should have management experience with responsibility for both commercial results and personnel, and at least one year as process advisor or management consultant. These project managers and management consultants are the actual providers of the competence and services during the Navigator process. The management consultant’s brief, as provided by IN, is that they shall support the companies during the process, not supplementing the companies with additional resources, but with added competence.

The project manager and management consultants are supplemented by invited experts during the various seminars. Personnel resources are also provided by Innovation Norway’s foreign offices from the relevant markets.

### **Concerns about the Navigator programme**

Being students in the International Management module, we have been exposed to a varied set of concerns and considerations of a company manager operating in the international business environment. Whether he/she is operating a MNC or a SME with operations abroad is not of prime concern, as the concerns and considerations are similar and compatible.

The Navigator programme is user driven, in the context that the participating companies have a large say in the themes that will be presented and discussed during the five to six seminars. It is also expected to be user driven, as the prime brief to the management consultants are to support the company during their definition of the action plan. From this we see that Innovation Norway relies heavily on the expertise and experience of the management consultants.

Our prime concerns relative to the Navigator programme are to which extent the programme addresses themes which, according to theory and management literature, are important and non-negligible. Some of the themes that are considered important are:

* Reasons for internationalization.	There is a wide range of options from the companies living the first version of the Uppsala model for expansion, to the born global companies that from the first day of operation considers the global market as one market, and develop an organization capable of handling a global market.
* Dominant view of the foreign market or foreign industry.	Is the focal company looking for market opportunities, sourcing of materials, new suppliers, partnering companies for further product development, or becoming an actor in the innovation system of an important international actor/client.
* Selected form of entrance strategy.	There is a long range from the market approach of hiring a local agent representing the company to a wholly owned foreign subsidiary, and a range of intermediate

	options.
* Network considerations.	Partly coupled to the second theme: looking for partnering companies, universities or research facilities supplementing what is locally available.
* Business culture differences/Cross cultural management	A substantial part of the international management research is focused on the wide range of business culture, culture differences, and how to accommodate and manage the culture differences within a MNE

In our thesis, we have focused on the Network consideration, and the results from the company interviews are discussed under this focus. However, IN should not ignore the other themes as they, according to established theory, will play an important role on the company's success in entering the foreign market.

## References

Innovation Norway: "Navigator Programme Description"

## **Annex IV Consent form**

Through this letter we would like to inform you about our study and ask for your consent to participate.

This research is the Master Thesis for two students at Norwegian Business School BI (Handelshøyskolen BI) at the faculty of Strategy and Logistics in the course International Management. Their student numbers are 086636 and 0013618.

The students' advisor and contact details are as follows:

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The motivation and purpose is to improve the knowledge and understanding of how Norwegian businesses can increase their success of entering the Brazilian oil and gas industry market. It is the goal of the work that it should lead to suggestions for improvement on the services offered by Innovation Norway to companies with the ambition to do business within the oil and gas sector in Brazil. The data gathered through the interviews will be used for this purpose and goal. The specific research question is as follows:

“To what extent does the Navigator program establish or provide access to relevant and useful business networks and contacts for Norwegian companies planning an entry into the Brazilian market?”

Some interviewees will have been through the Navigator program, some not.

Participation is fully voluntary and you can withdraw at any time during the study without stating a reason. The data gathered will be destroyed after the Thesis has been graded and the appeal period has run out, on the 1<sup>st</sup> September 2013 at the latest. The only information left will be the Thesis paper itself which will be publically accessible.

The main method for data gathering is these interviews. In order to fully focus on your responses, we would like to record the interview. We will ask you confirm your consent to the recording of the interview at the start of the interview. However, you can participate in the study even if you do not consent to recording.

All and any information you provide that contributes to the Thesis will be treated with confidentiality and be fully anonymised so that it cannot be traced back to you. The only persons with access to the identifiable data and the recordings are the two students, their advisor and the Thesis censors.

The study is registered with The Data Protection Official for Research (Personvernombudet for forskning, Norsk samfunnsvitenskapelig datatjeneste AS [www.nsd.uib.no](http://www.nsd.uib.no)) to enable the protection of your rights.

*I have received written information about the study outlined in the document Annex V Consent form and agree to take part in the study.*

\_\_\_\_\_

Name

\_\_\_\_\_

Signature

If you do not consent to that the interview is recorded, please tick this box: