



Submarine Cables: Structuring and Financing Options

salience whitepaper

Authors: Dominique Reverdy and Ivan Skenderoski
January 2015



Table of Contents

| | |
|---|-----------|
| Executive Summary | 3 |
| Introduction | 5 |
| Typical funding requirements for submarine cable projects | 5 |
| Selecting and managing stakeholders | 7 |
| <i>Investors and strategic partners – Interest and level of involvement</i> | <i>7</i> |
| <i>Power-interest matrix analysis</i> | <i>8</i> |
| Different ownership approaches | 10 |
| <i>Overview of different ownership structures</i> | <i>10</i> |
| <i>Pros and cons of ownership alternatives</i> | <i>13</i> |
| <i>Case study 1 – EASSy cable mix of approaches</i> | <i>14</i> |
| <i>Case study 2 – ACE</i> | <i>15</i> |
| Financing options | 16 |
| <i>Introduction</i> | <i>16</i> |
| <i>Project financing</i> | <i>16</i> |
| <i>Vendor financing</i> | <i>17</i> |
| <i>Documentary credits</i> | <i>19</i> |
| <i>Pre-sales and IRU down payments</i> | <i>19</i> |
| Conclusion | 20 |
| Authors | 21 |

Executive summary

There is no longer question about the key importance of affordable broadband communication for the development of a country its public welfare and its economic growth. This has been the key driver for impressive growth rates witnessed in developed countries, and no less impressive expected growth rates, not only in emerging market, but also in what appears to be mature markets.

Adding to this the multiplication of data services, the emergence of big data, and the overall willingness to access all services and data in a non-discriminatory fashion, broadband market is still anticipating healthy growth around the world, and in particular in MENA region.

In its recent report on broadband services in the MENA region, the World Bank mentions that from 2012 to 2017, internet traffic is expected to grow in the region by 41% compound annual growth rate. In 2017, internet traffic is expected to be 204 times higher than its level in 2006.

This has direct implications on the need for increased infrastructure, and many analysis have dealt with national broadband strategies (cf. Salience white papers on the topic). However, it is worth noting that implications shall spread to international connectivity and in particular subsea cable industry. This justifies that despite the presence of 10 to 15 subsea cables linking MENA countries there are still many existing new ventures considered underpinned with robust business plans.

Once the viability of a subsea cable project is analysed, from technical and socio-economic viewpoint, careful considerations is needed on the venture composition and the capital structure.

Any such venture must aim at achieving a set of objectives that are common across these projects:

- Minimising their upfront funding commitments
- Keeping the management control of the project
- De-risking the business case by achieving some pre-commitment from landing partners
- Increasing their political influence in the view of facilitating the network deployment

On the other hand a potential partner will also have its personal motivation for joining the project. From experience these projects usually attract partners from the following categories:

- Government and semi-government companies
- Landing Partners
- Cable users
- Investment funds

Subsea project initiators shall also decide which type of contracting scheme the operating entity should follow. In the submarine cable industry three types of structures are common:

1. Private ownership
2. Consortium
3. Public Private Partnership (PPP)

However nowadays it is even more common that cable projects adopt more sophisticated structures mixing some of the above in the search for optimising benefits while mitigating financial and operating risks.

Partnership that will facilitate the rollout of the network can mitigate some of the operating risk. This can be provided by either various government entities which will assist in providing all necessary rights and licences or add credibility to the project, or from partners able to add a significant value to the network such as landing partners or onward capacity providers.

Operating risk can also be mitigated by securing significant amount of capacity sales before RFS. Typically landing station providers tend to fulfil this role but other network operators or even government entities could be able to bring this to the project. Pre-sale down payments are a common way to reduce financial exposure in an industry where long terms IRUs are frequently used, especially at the beginning of the lifetime of the cable.

Financing might be used either to provide direct funding of the project or for securing shareholder contribution. Although the raising of financing often proves opportunistic and in order to have well balanced financial sheets, it is generally accepted that OPEX should be financed via short term facilities whereas CAPEX should be financed with long term credits or equity. Various options for arranging the financing exist such as:

- Project Financing provided by Development Financial Institutions (DFIs), Government Export Credit Agencies or conventional banks
- Vendor financing in the form of short term favourable payment terms to long term loans backed by vendor's financial institution
- Documentary credits which are debts provided by a bank or a financial institution for the sole purpose of the acquisition of a specific good – with payments from the bank directly to the vendor
- Down payments from the pre-RFS and IRU sales therefore reducing the need for other financing

In conclusion, the structure of a subsea project, as well as its financing, must be addressed at a very early stage, as these are keys to the success of the venture, even before a stable business plan, as history shows in the major project failures.

Introduction

The aim of this white paper is to analyse and compare different commercial structures and financing options applicable for submarine cable ventures.

Initially we define the typical funding requirements for a submarine cable are how the spending is divided between the Capital Expenditure (CAPEX) and the Operating Expenditure (OPEX) components applicable across the cable lifespan.

We then identify the potential stakeholders and their motivations for investing or participation in submarine cable projects.

In the next section we cover different approaches for the equity shareholders such as private, consortium cable and a hybrid/mixed approach and compare the pros and cons of each approach. We also describe the different debt financing schemes available. For all of these and where applicable we provide real examples from the industry.

Lastly we conclude with specific recommendations on the factors that need to be considered for all new investors in the submarine cables.

Typical Funding Requirements for Submarine Cable Projects

As in any large infrastructure project, submarine cable projects require heavy upfront CAPEX investment with the ongoing operational expenditure being relatively low (usually less than 6% of the CAPEX per annum) which should be funded by cash inflows generated by the project. In general the funding requirement for this type of project could be split into two categories:

Pre Ready For Service (RFS) date:

- **Cable build CAPEX**, payable to the main manufacture and cable installation supplier and other contractors involved in project management of the build
- **Operational and team costs** during the cable build phase, including any presales and marketing expense during the build phase
- **Payments required to secure IRU onward capacity** needed for the end to end circuits (if applicable)

Post RFS date:

- **Ongoing operational costs** until the cash-flow from the capacity sales covers the OPEX of the company.

The typical build timeframes for submarine cables would be in the region of one to three years depending on the cable length and the complexity of the marine operations.

| Cable | Project Initiation | Construction Start | RFS |
|-------------|--------------------|--------------------|----------------|
| EIG | May 2008 | June 2009 | February 2011 |
| EASSY | December 2003 | March 2008 | July 2010 |
| GBI | December 2008 | June 2009 | February 2012 |
| TEAMS | November 2006 | January 2008 | October 2009 |
| Sea-Me-We 3 | 1993 | 1997 | September 1999 |
| Sea-Me-We 4 | March 2004 | June 2004 | December 2005 |

Figure 1 - Subsea Project Milestones in the Middle East

We note that for most of the cables especially for the ones deployed across the Middle East the achieved RFS date is usually delayed from the initially planned RFS date due to various complications – with majority of the factors being of non-technical nature.

We also note that the actual payment curve could widely differentiate from the planned payment schedule. The figure below shows the difference between the planned and the actual cumulative cable build CAPEX profile of a recent deployment.

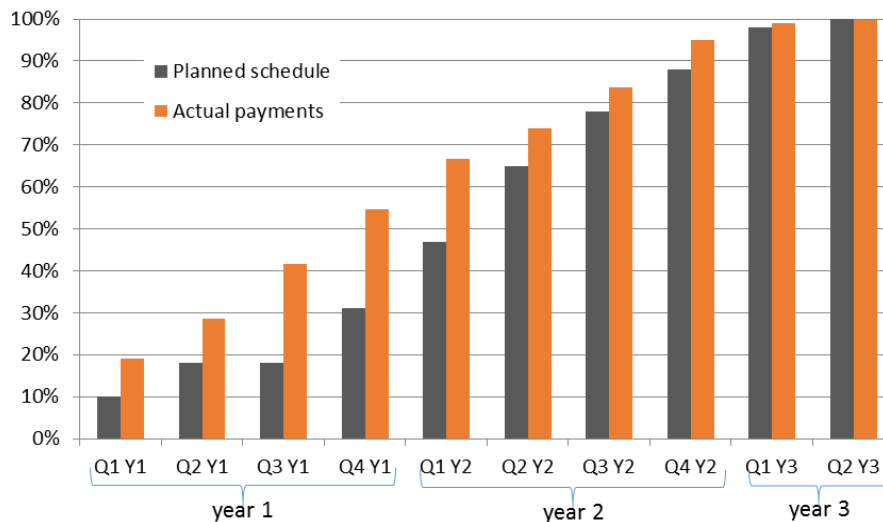


Figure 2 - Typical cumulative CAPEX cable build schedule

The cable OPEX is dependent on a number of factors such as technical choices, operational and restoration strategy. The below represents a typical OPEX cost structure as a function of cumulative CAPEX, for an average consortium based subsea cable.

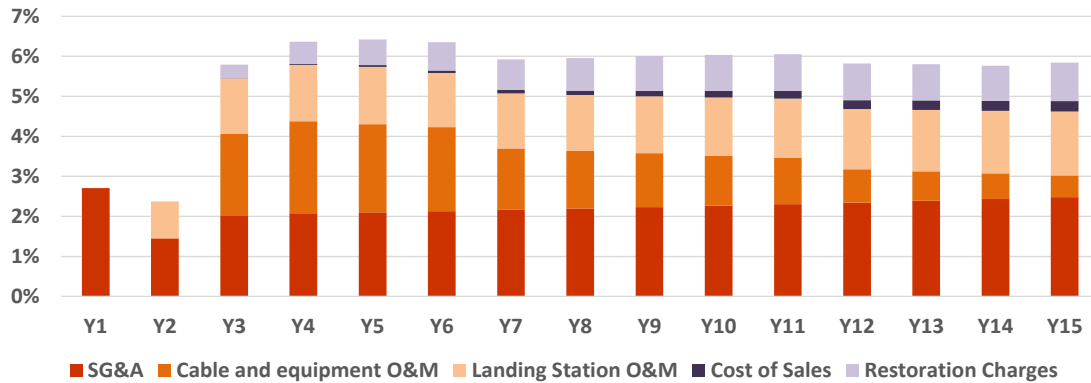


Figure 3 - Typical OPEX Projections as a percentage of cumulative CAPEX

Based on the above, any new submarine cable venture will need significant funding well before generating any revenues, as RFS date could be fairly far from initial rollout. As we will elaborate further in this document, some of these funds might come from a pre-sales activity and down-payments of landing partners and some need to be secured through other means.

Selecting and managing stakeholders

Investors and Strategic Partners - Interests and level of involvement

For the project initiators, the need for involving additional stakeholders can be motivated by two factors:

1. Additional financing (Passive equity financing)
2. Political and commercial influence (Strategic partnership)

A passive investor, such as a general investment fund, once convinced by the feasibility of the project and its potential return on investment, might require, in addition to the acquired equity, to be represented at the Board of Directors (BoD) but shall not interfere in the daily operations.

However a strategic partner would demand some level of operational control, either by taking over 50% of the management control or by filling some of the key executive positions. These details are generally agreed upon within the Shareholder's Agreement. On the other side the project initiators will be reluctant to give away management control unless is strongly justified by commercial and/or political upside brought by the new strategic partner. The upsides are generally in one of the following categories:

1. **Financial and political support** to the landing of the cable abroad
2. **Accelerating authorisation** and regulatory approvals nationally
3. **Provide customer base** from cable RFS

It is essential to be guaranteed at least one of these upsides before considering new strategic partnership. Having stated this, it is not uncommon to be imposed a strategic partner, generally a landing party, for the mere feasibility of the project.

There are a usually few types of strategic partners, whose contributions vary from one another:

Government & semi-government companies

These are usually not related to the telecom industry, but would add significant political positioning to the project, in exchange of equity. In this arrangement, some level of financing will also be added, whether directly or through the procurement of collateral therefore facilitating external funding.

Landing partners – licensed for international gateways

These are the licenced telecom operators that could land subsea cables and operate a landing station in one of the targeted countries. By partnering with these entities the lead time for setting up a landing station, including permitting and building would significantly decrease. And in some cases this might be the only way to land a cable in the chosen countries.

The partnership is generally in the form of a commercial agreement based on colocation and O&M. However, a landing partner may also be considered as an equity partner, bringing to the project not only landing facilities, but also some level of financing.

Cable users - ISPs, mobile and fixed telecom companies, international telecom operators needing transit

Any telecom service provider operating or selling in the countries where the submarine cable lands could be considered for partnership. The usual relationship would be of a commercial nature in the form of preselling of capacity and gaining early cash inflow that would significantly decrease the need for additional financing. Equity partnerships could also be considered against cash input, though this would go with a right to upgrade, effectively depriving the initial project owners from a share of the cable capacity.

Investment funds with some management control

Some investment funds, with a strong telecom expertise, such as Mubadala or EIT in the UAE, could contribute to equity with a significant share of the management control. These are used to take an active part in the operation, and can bring executive experience, as well as potential synergies with their existing assets, such as purchasing power.

As example, Dubai based EIT, the international ICT investment branch of Dubai Holding, has acquired 30% of the pan European cable wholesaler Interoute in 2005. To date, EIT is still heavily involved in the operations of the cable operator, and could now be seeking a profitable exit.

Power-interest matrix analysis

Once a list of potential partners that could positively contribute to the project is established, it is essential to understand the motivation of each one of them. The Power-Interest matrix is one way of (graphically) presenting the findings of a stakeholder analysis. The matrix below positions stakeholders according to two key attributes: the level of power (influence) they hold and the level of interest they have in the project.

| | |
|--|---|
| <p>High Power – Low Interest</p> <p>Stakeholders whose actions can affect the project’s ability to meet its objectives but who do not stand to lose or gain much from the project</p> | <p>High Power – High Interest</p> <p>Stakeholders whose actions can affect the project’s ability to meet its objectives and who stand to lose or gain significantly from the project</p> |
| <p>Low Power – Low Interest</p> <p>Stakeholders whose actions cannot affect the project’s ability to meet its objectives and who do not stand to lose or gain much from the project</p> | <p>Low Power – High Interest</p> <p>Stakeholders whose actions cannot affect the project’s ability to meet its objectives but who stand to lose or gain significantly from the project</p> |

Table 1 - Power - Interest Matrix

The level of power depends on the quantity and type of resources a stakeholder can mobilise to promote its position regarding the project.

On the other hand, the level of interest refers to the priority and importance the stakeholder attaches to the project. It is a measurement of how interested (or motivated) the stakeholder is in influencing the decision-making process. It is assumed that the more stakeholders are aware of what they stand to gain from a project, the higher their level of interest will be.

The combination of these two attributes helps in assessing the capability a stakeholder has to block or promote their position regarding the project, join with others to form a coalition of support or opposition, and influence the decision-making process.

Example of Power – Interest Matrix for EASSy cable is given below:

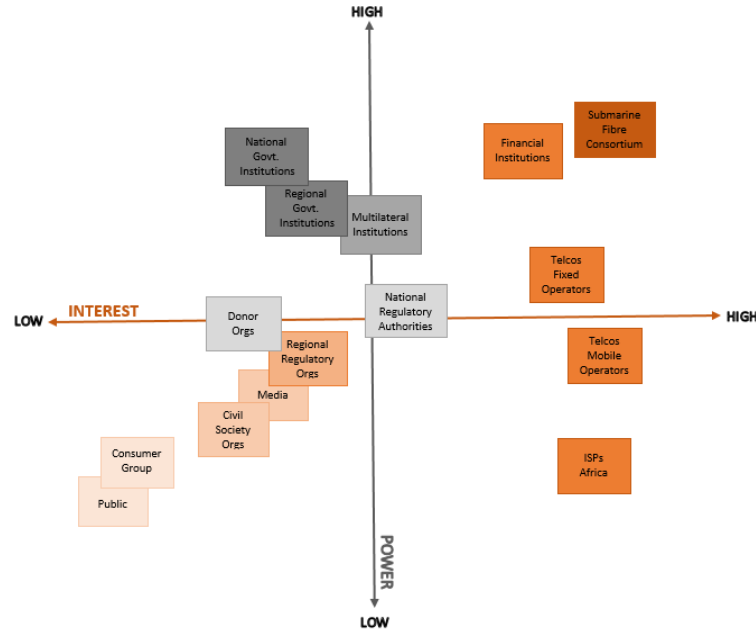


Figure 4 - Initial Power - Interest Graph for EASSY1

¹ A stakeholder analysis of the EASSy - ABIODUN JAGUN

Different ownership approaches

Overview of different ownership structures

There are three main ownership structures that are common in the submarine cable industry. They usually differ in nature and the specific commercial objectives that are to be achieved.

Private Cable - wholly owned by investment vehicles

In this structure, investment is made by one or several strategic investors (such as sovereign funds) to profit on the commercial opportunity created by underserved growing demand in the specific region or countries. More importantly the investment enables wider strategic development of other vertical sectors (e.g. Telecom, ICT, Education) that depend on availability of reliable fair-priced international connectivity.

The investors involved usually have a wider portfolio of regional investments and are looking at a cable investment to support some of their other interests. The interests here could range from development of specific industry such as education and R&D as in the case of the Qatar Foundation with GBI, to protecting national and regional interests by creating secure and reliable communication links with the particular country or region.

In the case of the direct shareholders being Investment Funds, the cable does not generally allow for direct investment by an operator nor provide exclusivity to specific operators. These are non-discriminatory and provide open and fair access to the cable capacity for all access seekers.

The investment vehicle might also be directly owned by an operator or telecom group that sees direct synergies in owning a subsea cable. This is the case with Orascom's MENA cable, and Reliance's Flag. The latter has invested heavily in the deployment of its worldwide submarine cable system, in order to economically offer managed wide area network services over the six continents.

The decision making procedures are similar with the other private cables enabling quick and efficient decisions to be made – with the added influence of preserving the strategic wider aims of its investors and enablement of adjacent markets. In this case the decision to expand or upgrade might be based on a strategic direction for development of the region or specific enablement of industry sector in the region.

As these cables base their business case on overall demand projections and underserved market need, they do not require any customer's pre-commitment. The initial cost is borne by the raising capital exercise and the cable products will be offered and sold to all operators without (usually) exclusivity given to specific entity.

Consortium cable

Historically, this type of arrangement for building and operating submarine cables has been established to help interconnecting the incumbent state-owned telecommunication networks in order to enable international voice and data services. More recently, private operators and groups have also teamed up into consortiums, with the view of either owning international broadband access for their own operations (MTN in WACS), or to be able to offer competitive wholesale solutions (TTCL in EASSy).

In essence operators establish a need for data links between a number of international points and then group together (in a consortium) to satisfy that need by jointly building and operating a submarine cable.

Capital costs are entirely borne by the consortium members, in accordance with their ownership agreement, usually referenced to Construction and Maintenance Agreement (C&MA). Each member is allocated units of capacity in Minimum Investment Units (MIUs) or Minimum Assignable Unit (MAUs), according to their participation. In short, the overall cost of the system is divided by the investors with some mutually agreed volume discount matrix to factor the actual money paid by each investor.

In order to illustrate this, a typical case of a cable consortium is given below.

The C&MA gives the total investment split into MIUs and all network segments are allocated a distance related number of MIUs. The table below shows the agreed MIUs allocation table between all landing stations of the cable. Each operator according to its financial contribution is allocated a given quantity of MIUs.

| CLS | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|-----|-----|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|
| 1 | 400 | 2,025 | 2,363 | 3,997 | 4,294 | 5,673 | 6,241 | 7,452 | 8,771 | 12,004 | 12,254 | 12,049 |
| 2 | | 1,625 | 1,963 | 3,597 | 3,154 | 5,273 | 5,841 | 7,052 | 8,371 | 11,604 | 11,854 | 11,649 |
| 3 | | | 670 | 2,304 | 1,861 | 3,980 | 4,548 | 5,759 | 7,077 | 10,310 | 10,560 | 10,355 |
| 4 | | | | 1,656 | 1,213 | 3,332 | 3,900 | 5,111 | 6,430 | 9,663 | 9,913 | 9,708 |
| 5 | | | | | 857 | 2,976 | 3,544 | 4,755 | 6,074 | 9,307 | 9,557 | 9,352 |
| 6 | | | | | | 1,793 | 2,361 | 3,572 | 4,891 | 8,124 | 8,374 | 8,169 |
| 7 | | | | | | | 568 | 1,779 | 3,098 | 6,331 | 6,581 | 6,376 |
| 8 | | | | | | | | 1,211 | 2,530 | 5,763 | 6,013 | 5,808 |
| 9 | | | | | | | | | 1,429 | 4,662 | 4,912 | 4,707 |
| 10 | | | | | | | | | | 3,441 | 3,691 | 3,486 |
| 11 | | | | | | | | | | | 250 | 1,955 |
| 12 | | | | | | | | | | | | 2,205 |

Table 2 - MIUs Allocation Table

According to the level of contribution each consortium member is classified as Tier A, B, C, D or E and given an agreed discount. The table below gives an example of how discounts can be structured, in order to incentivise a bigger group to maximise their contribution.

| Tier | Initial Investments (USDm) | Price Ratio | Cost per STM1 End-to-end (USDk) |
|--------|----------------------------|-------------|---------------------------------|
| Tier A | > 50 | 1.0 | 214 |
| Tier B | 40 to 50 | 1.2 | 256 |
| Tier C | 30 to 40 | 1.4 | 299 |
| Tier D | 15 to 30 | 1.7 | 363 |
| Tier E | < 15 | 2.0 | 428 |

Table 3 - Consortium's Tier Structure

This is to say that capacity unit cost for a Tier C member would result 1.4 times (i.e. 40%) higher than what a Tier A member would pay.

In addition to the initial investment, each operator shall contribute to the O&M expenses, at cost, according to its personal share of the cable.

Each operator can activate its allocated MIUs/MAUs upon request to the consortium central office. By doing so it will need to use some of the landing stations, leading to additional rental charges, pre-agreed within the C&MA.

These landing stations are not included within the total cable investment. Landing partners are generally the consortium members and they incur the total cost of building and operating the landing stations. These costs are then retrieved from the consortium either in one shot upon RFS or along the life time of the cable. The Central Billing Party, representing consortium's body in charge of the finance side of the cable deployment, is putting in place complex mechanism to ensure total investment recovery for the landing partners.

In some cases, landing partners are reimbursed along the lifetime of the asset, as each connected operator is charged with a monthly contribution towards the landing station it uses.

Finally, we note that a consortium rarely has a legal structure as it only represents a cost sharing agreement where each member owns part of a major asset. If necessary consortium members can seek financing separately, but the consortium itself cannot incur any debt.

Public Private Partnership (PPP)

As per the World Bank's ICT organisation, "*a Public Private Partnership (PPP) is an agreement between the government and private organisations to develop, operate, maintain and market a network by sharing risks and rewards*".

The involvement of public entities within private projects, in particular complex international telecom projects generates benefits for the whole value chain. Providing that government's incentives relate to public welfare rather than personal profit PPPs tend to enable higher risk projects with lower return expectations to be feasible.

The involvement of private players also impacts and decreases the project risk for the public sector, as it ensures higher quality of service and some anchor customers. Additionally, the combination of private player's purchasing power and the security of public support lead to much lower TCOs of the project.

For the public sector, it is also interesting to trade influence with private financing. Indeed, the direct involvement of public entities often results in shorter lead time and critical project speed. There are many forms of PPP that have been used in the telecom sector such as:

- **Consortium** type where one or more government entities take direct part in the consortium is probably the most commonly used in submarine cable ventures. For example in the ACE cable public contribution reached more than 50% of the total cost. The WACS project includes DRC's SCPT; both SEAMEWE-3 and SEAMEWE-4 include the Communication Authority of Thailand therefore demonstrating direct involvement from public sector.
- **Pre-sale Commitment**, where a public entity commits to buy in advance a major chunk of the available capacity, could also be found. This generates some initial positive cash flow, and facilitates further financing.
- **Management Contract** or Build, Operate and Transfer (BOT) type of agreement, where the public sectors gives a private player the responsibility for deploying and operating the network on its behalf against annual fees or following a revenue sharing agreement. We note that this is more to be found in the terrestrial fibre business with examples across Africa.
- **Subsidisation**: government can also subsidise the deployment of an infrastructure it believes is essential to the welfare of its citizens. In this scenario, just like for the pre-sale commitment, there is no ownership of the project nor control over the project, from the public sector.

Pros and Cons of ownership alternatives

We have summarised the typical pros and cons of the various approaches in the table shown below:

| Structure | Pros | Cons |
|---------------|---------------------------------------|--|
| Private Cable | Faster decision making process | Higher financial risk |
| | Capacity at cost for owners | Landing complexities abroad |
| | Clear accountability | Lower political influence |
| | Easier alignment between shareholders | Commercially challenging |
| | Higher competitive edge | |
| Consortium | Low/shared risk | Inefficient & inflexible |
| | Capacity at cost for owners | Lack of single accountability |
| | Predictable | Slow & bureaucratic approval processes |
| | Guaranteed access | Conflicts of interest between owners |
| | Ease of permitting and landing rights | Compromises in decision making |
| | Control for owners | Lack of competitive edge |

| | | |
|-----|---------------------------------------|-------------------------------------|
| PPP | Lower risk | Inefficient & inflexible |
| | Capacity at cost for owners | Slower decision making process |
| | Higher political influence | Could prove bureaucratic |
| | Ease of permitting and landing rights | Difficult alignment between parties |
| | Easier funding | Burdensome covenants |
| | Commercial upsides | Lower returns |

Table 4 - Pros & Cons of various structure alternatives

CASE STUDY 1 - EASSy cable mix of approaches

A new subsea venture should not feel confined to one of the above typical structures, as a mix of those can also be considered according to the specific need of the initial shareholders, the local situation of the telecom and financing market, and the objectives of all stakeholders.

Typically, consortium type of ownership structure can allow for some public involvement.

Along those lines, one of the most characteristic cases is the structure of EASSy consortium.

On paper EASSy is organised as a typical cable consortium, including various telecom players, each showing its own interest in the project.

As such, with no direct involvement of any governmental bodies, except for 5 incumbents, EASSy cannot be considered as a flagship PPP endeavour. However, WIOCC, the consortium member with the highest share of the project of (28%), is itself comprised of 14 smaller telecom players. These include public entities such as the Lesotho Communications Authority, whose objective consists of contributing to the development of its telecom sector, in a country with one of the lowest broadband penetration rates worldwide. Additionally, WIOCC was initially created for the specific purpose of enabling smaller players to jointly access ownership to some EASSy capacity, at discounts normally reserved to bigger players. Finally, WIOCC's initial mission was to open the most remote part of Africa to affordable communications. This is well summarised in WIOCC's current vision: "To make an enduring contribution to Africa's communications".

The figure 5 summarises the structure of EASSy consortium and provides more details about WIOCC venture.

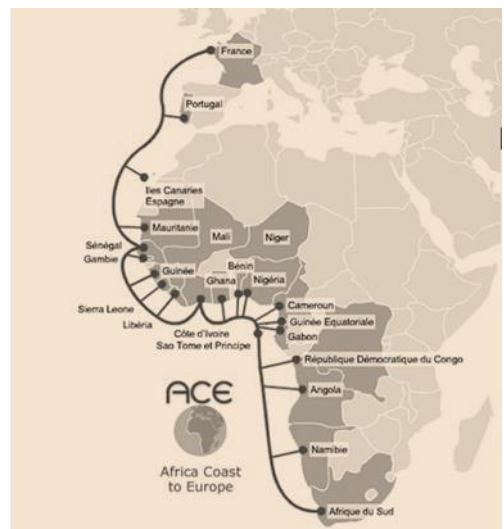
| WIOCC Shareholders | EASSy Consortium Members | |
|----------------------------------|--------------------------|-------------------|
| Botswana Telecom | WIOCC (28%) | British Telecom |
| Dalkom Somalia | Neotel | Saudi Telecom |
| Djibouti Telecom | MTN Group | Etisalat |
| Gilat Satcom | Bharti Airtel | Telma |
| Lesotho Communications Authority | TSA - Vodacom | Zamtel |
| LPTIC Libya | Comores Telecom | Mauritius Telecom |
| Onatel Burundi | Botswana Telecom | Sudatel |
| Seychelles Cable System Company | France Telecom | TTCL |
| TDM Mozambique | | |
| Telkom Kenya Orange | | |
| TelOne Zimbabwe | | |
| UCOM Burundi | | |
| Uganda Telecom | | |
| Zantel | | |

Figure 5 - EASSy and WIOCC Structure

CASE STUDY 2 - ACE

Similarly, the ACE consortium is comprised of 17 members, many of which are government bodies such as the République de Guinée Equatoriale or the République Gabonaise. The consortium also includes a PPP SPV specifically created for the involvement of the smallest economy in the world (São Tomé Príncipe) in this major African telecom project, for which the government provides heavy subsidy.

In this type of relationship, private players benefit directly from the influence of public authorities, in the country where they land, while the government's play an active role in the development of their country's ICT.



Financing Options

Introduction

Financing might be used either to provide direct funding of the project or for securing shareholder contribution. Increasing leverage might lead to financing decision to improve the project's IRR.

Although the raising of financing often proves opportunistic and in order to have well balanced financial sheets, it is generally accepted that OPEX should be financed via short term facilities, whereas CAPEX should be financed with long term credits or equity.

This section deals with various alternatives for project finance and differentiation is made between short, medium and long term financing.

Project Financing

We have seen in the past that projects in developing countries often find the support of Development Financial Institutions (DFIs). DFIs are backed by developed countries and provide guarantees to risky loans as well as direct financing or even, in some cases, equity contribution to a project proven to benefit the development of underserved countries or region. This type of financing was part of the establishment of the previously mentioned WIOCC entity, the key shareholder or EASSy cable. The figure below shows the structure of WIOCC's financing.

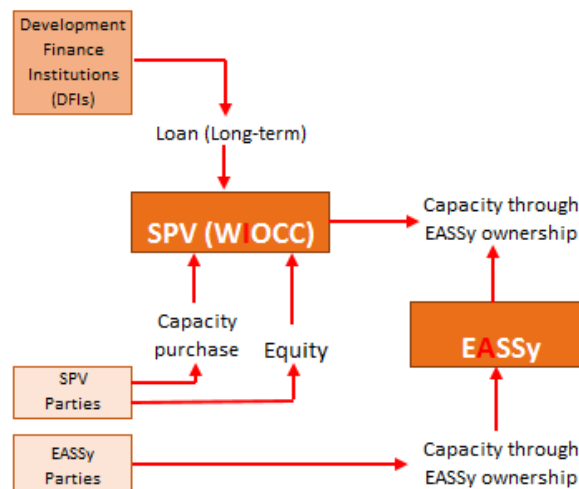


Figure 6 - WIOCC Financing Structure²

The complete DFI long term loan comprises the direct financing of three DFIs, AfDB backed by 53 African countries and 25 non-African countries, France's AFD and Germany's KfW, as well as from the World Bank's IFC.

² Developing and Implementing Sub-Optic ICT Infrastructures - Case Study: The EASSy / WIOCC Model (WIOCC 2013)

In other cases, financing can be provided by Export Credit Agencies: Government financial institutions whose objective is to support local industry exportations. For instance, Sweden's EKN provides guarantees to capital intensive projects against the acquisition of Ericsson's equipment. This year alone, EKN has issued collateral for USD 1bn loan to Telefonica (jointly with other Swedish ECA: SEK), and USD 1bn to USA's Sprint.

Alternatively, a pledge can be put against tangible assets in order to guaranty financing. Though, in the submarine industry, this is normally accompanied by a pledged on the shares of the operating company. South African operator Neotel is known for having pledged USD 2m for its SEACOM landing station, as well as participating in the USD 200m pledge towards Broadband Infracore in South Africa. Providing that a submarine project proves convincing to international lenders, a pledge on the asset could secure significant financing. It is unlikely though that full financing would be secured with such a pledge, hence requiring additional financing. This might result in a short stopping issue since a vendor financing solution, as well as an ECA, could request a negative pledge, i.e. while not requiring a pledge, will require that the investment not be pledged for another financing deal. Therefore, careful balancing of financing conditions needs to be carried out before committing all of the assets to one set of lenders.

Also, lenders might require personal guarantees from the shareholders. These generally are given by pledging shares of the shareholders businesses, as oppose to the operating company, which can be a limited SPV. Such collateral is unlikely to be requested by international lenders, but would rather be an option for raising finance on the local market.

Depending on the provided guarantees, the geographical situation of the project, the borrowed currency and the operating currency, bank financing can lead to additional costs that can range from few percentage points to several percent above one reference ratio, such as LIBOR.

Finally, as opposed to equity financing, debt financing imposes a heavy burden in terms of covenants and are closely monitored by the banks. Any breach in those entitles any lender to withdraw and consequently the borrower to reimburse part of the debt. This might be seen as a major risk in a country with significant inflation.

Vendor financing

In a highly competitive manufacturing industry such as telecom equipment, financing from the equipment vendors becomes a strong selling point. Indeed new telecom initiatives such as subsea cables and large mobile deployments are always CAPEX intensive, and revenues and related cash inflows only starts after the first phase of deployment. This evidently generates a spike in the need for funds at an early stage of the project. The later CAPEX commitments are set, the easier it is for the operator to generate the necessary cash due for payment. This in turn will have a significant impact on the project IRR, as it postpones cash outflows and reduces the need for upfront financing, leading to lower financing costs.

For illustration purposes we show three payment term scenarios related to the procurement of equipment worth USD 10m, assuming 15% WACC and 6% interest rate. In order to understand the savings that can be made in each case, we need to calculate the cost of equipment in real terms:

| Initial Assumptions | | | | | |
|----------------------------|----------|-----------------|------------------------|----------------------|--------------|
| Costs | | 10 USDm | | | |
| WACC | | 15% | | | |
| Interest Rate | | 6% | | | |
| Saving Calculation | | | | | |
| | Discount | Cost in | Year 1 | | |
| Payment Term | Ratio | Real Term (USD) | Financing Costs (USDm) | Total Savings (USDm) | Saving Ratio |
| Upon invoice | 100% | - | 0.60 | - | 0% |
| 6 months | 93% | 0.67 | 0.30 | 0.97 | 10% |
| 12 months | 87% | 1.30 | - | 1.60 | 16% |

Table 5 - Real Term Savings Generated by Preferential Payment Terms

As shown in the table above, a 6 months payment term leads to 10% saving compared to a payment upon invoice. A 12 months payment term leads to 16% savings. In addition, below 12 months, long term liabilities are not affected, since due payments are recorded under account payable. Consequently, the project’s balance sheet leverage is not impacted, which provides higher access to external financing, or helps keeping with covenants (if debts have already been raised). Consequently, securing favourable payment terms from major vendors is important consideration.

Longer payment terms tend to be referred to as vendor financing. Providing that these have to be factored in as long term liabilities, they are more similar to traditional debt. For the vendor these are treated differently, and will require the involvement of their financing team, and the backing by a financing institution, while payment terms can generally be granted by the commercial team. The difference between commercial payment terms and financing, depending on the vendor, lies around the 6 months limit.

In addition to the impact on the balance sheet, there are various differences between the former and the latter. To start with, a full set of well-defined conditions precedent will be requested for a vendor financing, while a payment term agreement is generally treated as a simple commercial agreement.

For the vendor also the treatment of one versus the other has major impact. The provision of vendor financing requires that the vendor subscribes to some insurance, effectively transferring the burden of the unpaid revenues to a third party. This will be done at a significant cost, which will be transferred one way or another to the buyer. The cost might be embedded into the prices of the BoQ, or treated as interest rate, or financing cost, within the financing agreement.

Yet, vendor financing tends to result in a significantly lighter burden than debt financing, and the apparent costs significantly lower. For this reason, one financing strategy consists in negotiating medium term vendor financing for which negotiations require a few months, and in parallel negotiate a long term financing, which is expected then to take over from the vendor financing. In effect, the vendor financing works as a bridge towards a syndicated longer term loan.

Documentary Credits

Documentary credits are debts raised from a bank or a financial institution, for the sole purpose of the acquisition of a specific good. Once all terms are agreed, the whole transaction is based on a set of predefined documents that guarantee the right delivery of the request goods, under the agreed conditions.

In practice three parties, the vendor, the buyer and its bank, all sign a joined credit agreement according to which, once the goods have been delivered and the vendor is able to prove it (with a pre-agreed set of documents such as commercial documents, transport documents, bill of landing, etc...), the buyer's bank settles the invoice to the vendors and the buyer records a debt in its books. This type of financing tends to be easier to raise as the financial institution knows in advance what the funds are used for as it is paying the supplier directly. In a traditional loan, the lender provides funding on the back of a business plan, and therefore takes a higher operational risk, as nothing except covenants prevents the funds to be used for SG&A rather than investment. Understandably, since the documentary credit, usually a Letter of Credit, means less risk to the bank, it results in lower financing costs and less complexity.

On the vendor's side, there is no risk since the bank guarantees payment upon delivery (although delayed Letters of Credit might also be used if the buyer wants to cumulate advantageous payment terms and LCs). Consequently, the lower risk will be factored in the BoQ, which should result in a lower price.

Pre-sales and IRU down payments

The nature of the submarine cable industry is such that a new cable generally responds to an existing need, due to either a new route or additional capacity needed on existing undersupplied route. Therefore it is not uncommon to secure pre-sales of large amount of capacity several months before cable RFS. Commercial agreements can then be reached, following which preferred pricing is offered against early down-payments. These down-payments will reduce the need for financing by the same amount, thus reducing financing costs. Consider a 5% financing cost over 5 years and a USD 10m down payment: this will reduce the financing cost by approximately USD 2m in real terms, i.e. 20%. This implies that the same level of discount can be given during the pre-sale negotiations.

In addition to pre-sales and following the cable RFS, the operator should concentrate on selling long term IRUs rather than leases. In a typical IRU commercial agreement, the buyer settles the full amount of the long term lease equivalent in a few payments, and in any case within one year from agreement.

Conclusion

There are various options for ownership and funding structures that could be considered as explained in the previous sections. Each new subsea venture should seek to balance the following strategic levers according to the objectives it aims to achieve:

- Maximise financial returns for the initial shareholders
- Minimise upfront funding commitments
- Manage the right level of management control
- Limit exposure and gain early solution of various regulatory limitations
- Gather appropriate political influence
- De-risk the business case by achieving some pre-commitment from landing partners and down payment for the pre-commitment
- Partner with a transit capacity provider SPV for onward routes
- Leverage by debt funding, calculating optimal leverage through financial engineering
- Balance leveraging of the project versus leveraging shareholders/consortium members

As with the examples given in the paper, the specific analysis that each project initiator will have to go through could result in a hybrid model where ownership is split between an SPV of private/public investors and indirect users of capacity.

Additional partners can be brought to the project following different types of agreements:

- Landing parties with minority equity in the project
- Large accounts with preferential rates against commitment and upfront payments
- Financial institutions as passive investors
- Government entities for local support

In any case, the structure of the project, as well as its financing must be addressed very early, as these are keys to the success of a submarine cable venture, even before a stable business plan, as History as shown in the major project failures.

Authors



Dominique Reverdy, Associate Partner

Dominique is a senior consultant with over 15 year successful delivery in financial, strategic, managerial and technical roles for operators and consultancies. Expertise in finance management, business and financial planning, business strategy and valuation, cost recovery.

Dominique worked for MTN in Dubai in the Group Wholesale and Finance division and as Senior Manager for M&A activities at Etisalat. Before that he was Head of Treasury for Watanya Algeria and has also spend number of years as a management consultant advising on economic issues.

He is has and Advance Diploma of Management Accounting from CiMA, an MBA in International Business from Instituto de Empresa and a MSc in Communication Systems from university of Wales.



Ivan Skenderoski, Managing Partner

Ivan has more than ten years of experience working in the telecoms sector across Europe, East Asia and the Middle East. Ivan has acted as a senior manager for operators in the Middle East region to deliver a national broadband strategy in Saudi Arabia and to lead on developing the business case, company start up and investment strategy for a Qatar based cable operator.

Prior to that Ivan held various roles in BT ranging from Principal consultant, Specialist Consultant working on Global Next Generation Network (NGN), Fibre Access and Services transformation projects in the UK, Singapore and India, responsible for setting up and heading BT's Asian Innovation Team in Malaysia. Ivan is regular speaker at telecom conferences on the subject of broadband strategies.

salience

consulting

Salience Consulting provides advisory services for telecom operators, governments and private investors in the Middle East. At our core we are a group of technical and management consultants who have been delivering telecoms projects in the Middle East for the past 10 years. Our regional knowledge and client expertise positions us at the forefront of telecommunications in the Middle East.

Salience Consulting DMCC
2407 Mazaya Business Avenue AA1
Jumeirah Lake Towers
Dubai
United Arab Emirates
Tel: +971 4 438 7041

www.salience.ae