# Route Planning & Cable Route Surveys

Graham Evans Director EGS Survey Group



### **Concept to Reality – Key Phases**

**Development of Business Model**  **Definition of Key Project Milestones**  **Project Concept** & Initial Investors

**Formation of Interim** 

Management Team

Feasibility Study & **Initial Engineering** 

> **Pre Survey Desk Study**

**Define Permitting Requirements** 

Secure System Pre **Survey Permits** 

Route Survey & **Burial Assessment**  Marine Operations Permitting

**Supply Contract** Processes

**Route Survey Contract Process** 

System Installation



# Permitting & Impact on Project Programs & Planning

- Identifying government ministries/agencies with project jurisdiction, and permits required under law/regulation, critical
- Varying permit lead times can lead to project planning and implementation phase dislocation if not properly sequenced
- Identification of permit interdependency a critical factor in project planning
- Impact of variations in permit lead times on project planning:
  - Minimal when dealing with domestic national systems
  - Most complex for long haul international systems with highly variable national jurisdictional requirements

Impact of route transits through non landing country jurisdictions:

- Can lead to protracted negotiations when transits are through territorial waters and/or contiguous zones
  - Complexities when either jurisdictional agencies approached late or not at all; or when unpredicted changes or routing requirements imposed Problems associated with conflicts with UNCLOS protocols for coastal states that have ratified UNCLOS



#### **UNCLOS & Cable Route Surveys**

- Cable route surveys are part of the process of laying submarine cables
   10 articles of UNCLOS govern the activities related to cables in the territorial sea, the EEZ, the continental shelf and the high seas
- The freedom to navigate and lay cables and the operations associated with ships exercising these freedoms are expressly provided for under these articles
- In reality, an increasing number of costal states are now insisting on permits; or the lesser, but no less program challenging, Letters of No Objection issued by the coastal state, for survey and cable installation within their EEZ
- The justification often given by coastal states imposing these permitting restrictions, is that the route survey constitutes Marine Scientific Research, the tools and methodology of which being similar



#### **Survey Permits & Conditions**

- Securing permissions to carry out survey operations vary from coastal state to coastal state and from straightforward to highly complex with lead-times measured in days to many months; associated conditions can include:
  - Requirement for all survey team members and vessel crew to undergo security checks
  - The imposition of restrictions on certain nationalities within the survey team and/or vessel crew; and even the country where the survey contractor's company is registered
  - Requirement for survey operations to be witnessed by security officers
  - Mandate for survey work be conducted by national research institutes to pre agreed hand over locations
  - Overlapping hand over locations in areas of disputed maritime claims can result in conflicting requirements by disputing Coastal States
  - Requirement for copies of survey data to be made available to the coastal state upon completion of the survey and/or copies of reports



**Cable Route Surveys** Why this activity is not Marine Scientific Research The fundamental objective of the cable route survey is to: Prove and document the preliminary route developed during initial project planning stages Identify and where practical, develop the pre survey route to avoid obstructions and hazards found during the survey **Determine final cable engineering and cable quantities** Confirm or amend preliminary cable protection strategies Provide all data and documentation necessary to support cable installation Provide the database framework for system maintenance



- **Cable Route Surveys** Why this activity is not Marine Scientific Research Marine Scientific Research is not defined in the Convention; however, it is clear that the scope of submarine cable route surveys cannot be construed as **Scientific Research** The route survey scope is not designed to perform systematic investigations into and study of the marine environment in order to establish facts and reach new conclusions about the marine environment, nor To carry out exploration or exploitation of living or non living resources Drill on the continental shelf Use explosives or harmful substances
  - Construct, operate or use artificial islands, installations or structures.



# Permits Program Impacts & Consequences

- Purchaser pressure and Supplier agreement for survey vessel to mobilize in advance of all survey operational permits being issued has resulted in:
  - Inability to commence operations upon arrival on site
  - Dislocation of planned survey phase sequence
  - Protracted vessel standby
  - Long out of sequence and non productive vessel transits
  - Increased costs through consequential Contract Variations
  - Substantial overall project delays with loaded installation vessels idle waiting on survey data and installation permits
- Increasing requirement for marine operational permits in EEZs particularly for non landing countries in "apparent" contravention of UNCLOS provisions has further negatively impacted permit lead time and project progress



## Mitigating Concerns of Compromised National Sovereignty & Security

- Early engagement and project briefings with government ministries and regulatory agencies with project jurisdiction
- Supervision of offshore activities by national security personnel (this happens regularly now)
- Implementation of real time AIS vessel tracking by coastal state
- Provision of copy of survey data to interested coastal states (this is commonly a requirement now)

