

International Hydrographic Organization

8th Meeting of the Hydrographic Services
and Standards Committee (HSSC-8)

IHO Headquarters, Monaco – 14 – 18 November 2016

ICPC Activities Affecting HSSC

Presentation by the International Cable
Protection Committee (ICPC)
By Graham Evans ICPC Chairman
Managing Director EGS Survey Group
gevans@egssurvey.com



© 2006-2016 International Cable Protection Committee Ltd

Background

- ❖ HSSC-7 ICPC introductory presentation and IHO/ICPC MOU proposition
- ❖ IHO/ICPC MOU signed April 2016
- ❖ IHO HSSC Chair presentation at ICPC Plenary, Hamburg April 2016
- ❖ ICPC support at the GEBCO Future Ocean Floor Mapping Forum in Monaco
- ❖ ICPC attends ISA 22nd Session, Kingston, Jamaica during which:
 - Attends IHO Side Event followed by discussions with IHO Secretary General
 - ICPC Side Event related to submarine cables and deep sea mining; and to the need for cable awareness
- ❖ ICPC holds Side Event at UN on BBNJ
- ❖ ICPC EC Meeting agrees that fulfilling the objectives of our MOU and continuing to develop our relationship with the IHO is an ICPC priority - ICPC IHO Focus Group identified
- ❖ Attendance at HSSC-8 with objectives to identify appropriate Working Group contacts in order to fulfil ICPC objectives

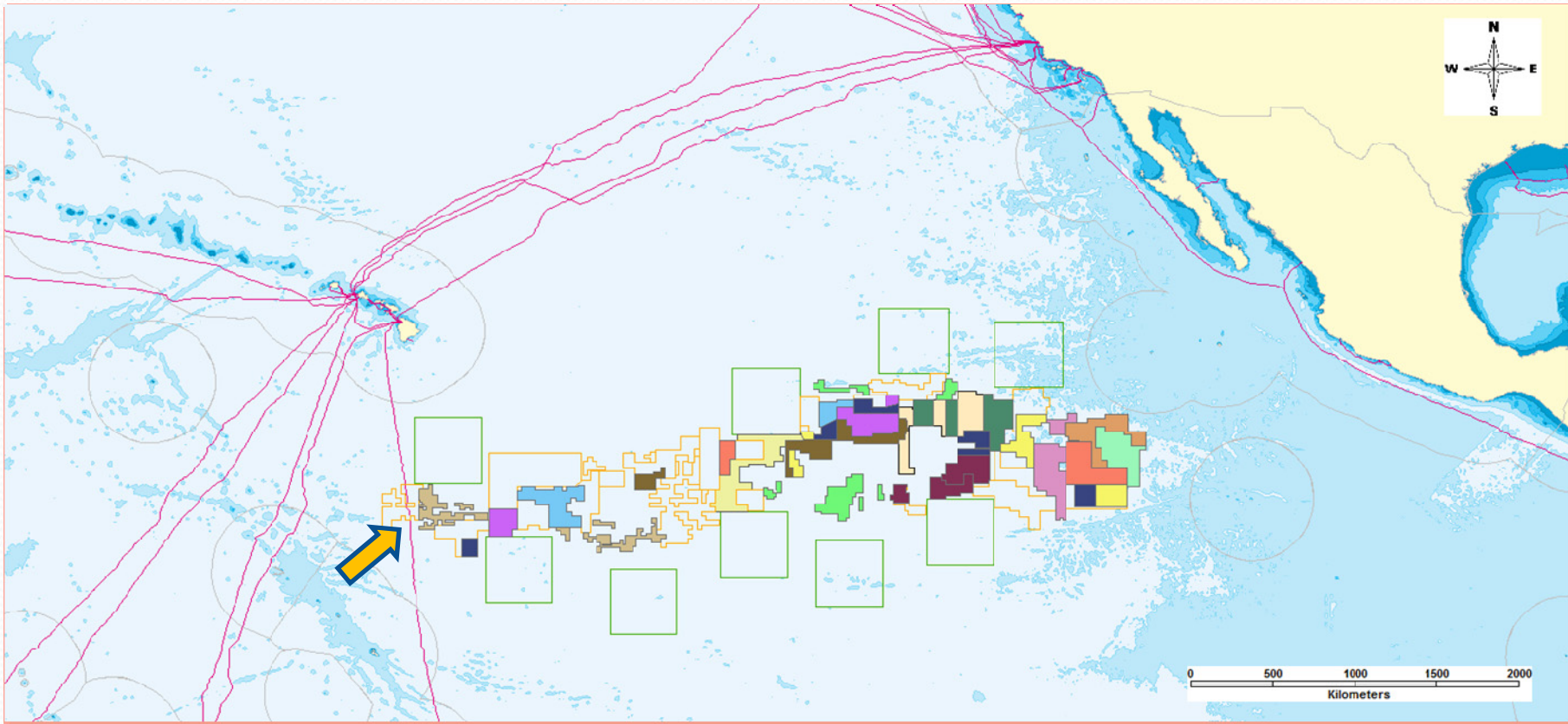
ICPC Priorities & MOU Objectives

- ❖ Identify appropriate HSSC Working Groups that would enable the ICPC IHO Focus Group to participate, and contribute to meeting stated key objectives including:
 - The development of a uniform set of cable charting standards for submarine cables adopted globally by HOs
 - Understanding compatible digital input formats for as-laid cable data that address IHO charting requirements
 - Reduction of lead times from as-laid cable data availability
 - A global approach to the issuance of Notices to Mariners for new cables
 - The development of standardized information in nautical publications drawing the mariners' attention to the necessity to protect cables against damage caused by ship operations
 - Charting policies that address hazards to submarine cables from deep sea mining, oil and gas activities and renewable energy developments
 - Provision of survey data, or metadata, collected as part of cable laying or maintenance activities, to the IHO Data Centre for Digital Bathymetry (DCDB)
- ❖ Potential Working Groups identified – S-100WG; NCWG; NIPWG; CSBWG

ICPC Short Term Priorities

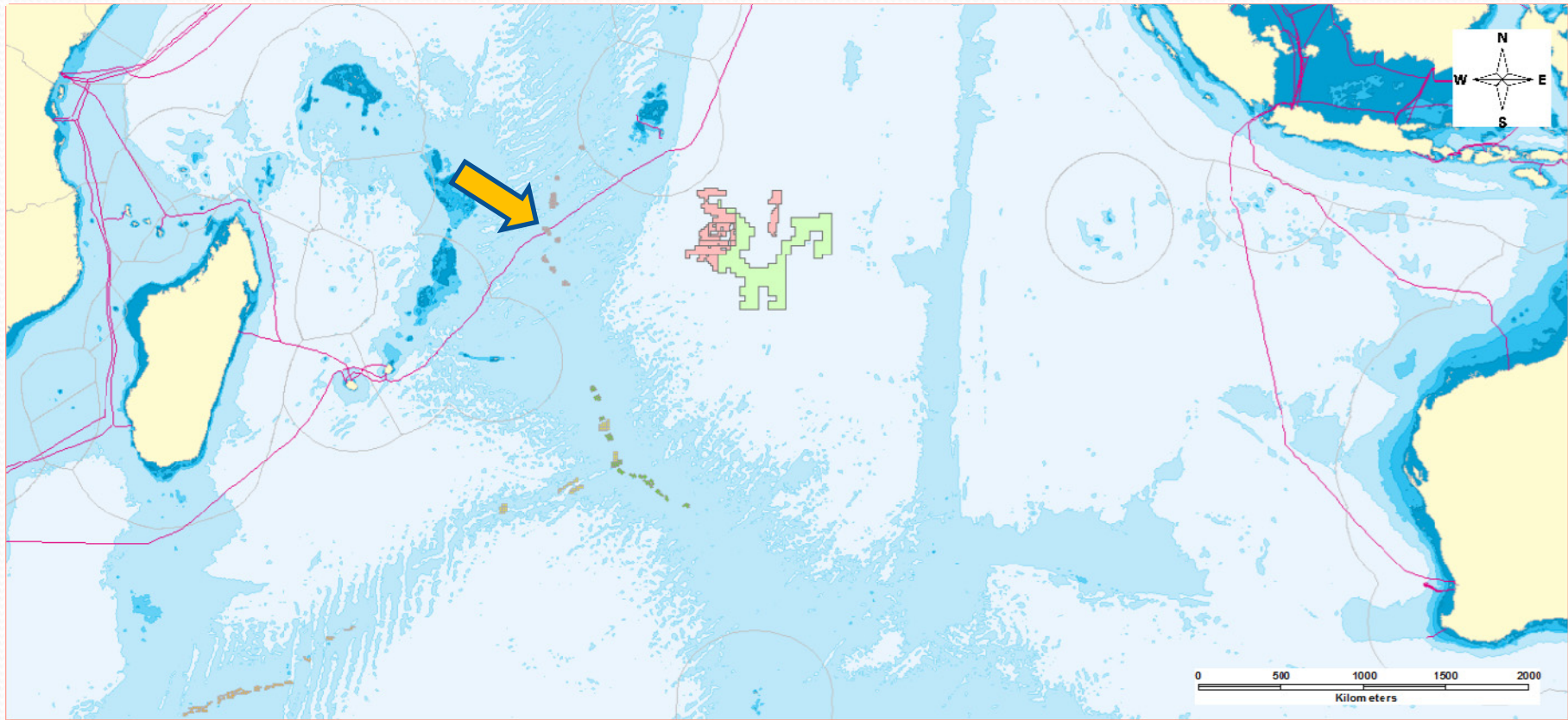
- ❖ Development of standardized information in nautical publications drawing the mariners' attention to the necessity to protect cables against damage caused by ship operations
 - ICPC appreciates the rapid work done by NIPWG post MoU signing to develop a Proposal for Submarine Cables Text Box (NIPWG Action Item 2-20)
 - Following review, minor amendments will be proposed by the ICPC such that the adoption target of December 2016 can be met
- ❖ Development of a uniform set of cable charting standards for submarine cables adopted globally by HOs; and:
- ❖ Charting policies that address hazards to submarine cables from deep sea mining
 - As a minimum S4 B-443 and S4 C-408.1 requirements for charting of cables to 2,000m should be uniformly applied by all HOs
 - Where ISA deep sea mining tenements are demarcated cables should be charted to full ocean depth
 - Charting standards should align with new ICPC Recommendation on Deep Sea Mining

Eastern Pacific CCZ Tenements



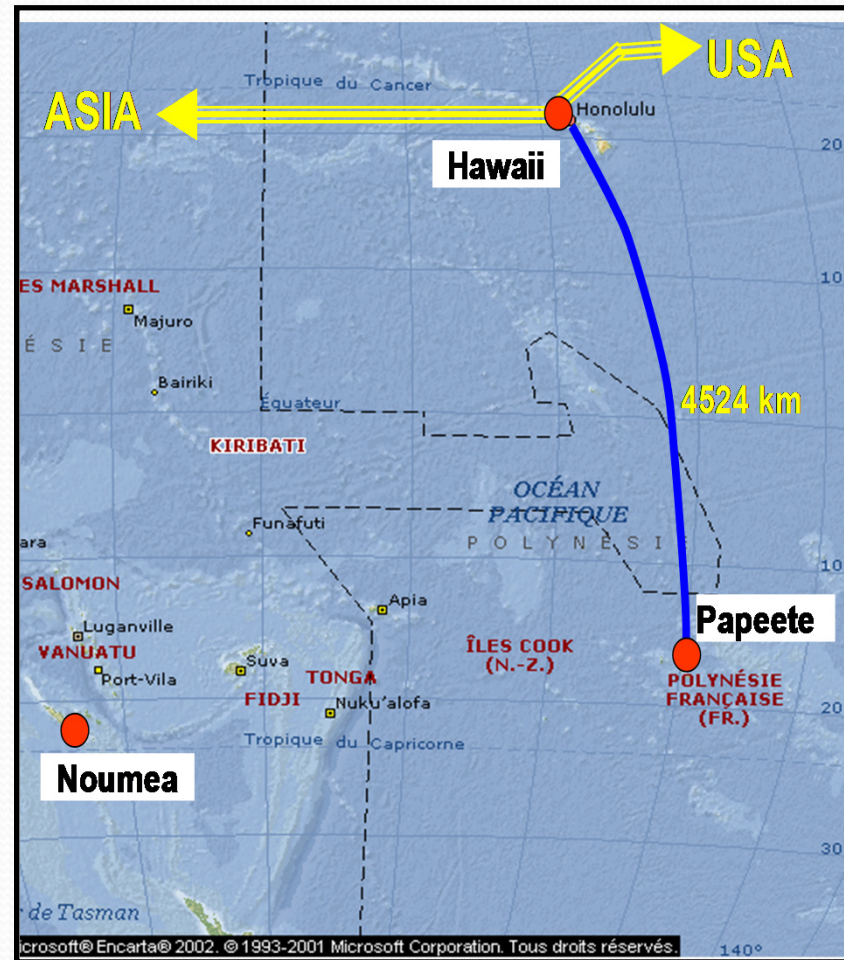
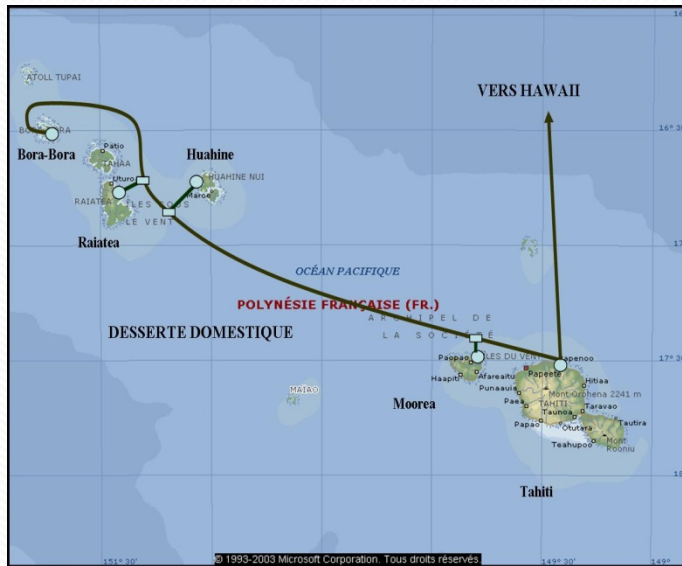
Honotua Cable crosses the Polymetallic Nodules Block 1

Indian Ocean Tenements



SAFE cable crosses the polymetallic sulphides exploration area assigned to the Republic of Korea

Honotua Cable System Maps



Honotua and COMRA exploration area



Consequences of Honotua damage

- ❖ Any damage to Honotua would have serious consequences for the economy and national security of French Polynesia.
- ❖ In the event of damage, OPT French Polynesia would be forced to rely on satellite capacity, which is more expensive, less secure, and of lesser quality than communications via submarine cable.
- ❖ Moreover, satellite capacity could not replace in full the capacity of Honotua.
- ❖ Many communications and related economic activity would necessarily be curtailed until Honotua was repaired, a process that could take weeks or months, depending on the nature of the damage, the location, the time of year (and type of weather), and other factors.

ICPC Short to Medium Term Priorities

- ❖ Defining compatible digital input formats for as-laid cable data that address IHO charting requirements (S100 and NCWG)
- ❖ Deriving a definition of input requirements for proposed S-100 S-4XX cable data layer (ref IHO Presentation at ICPC Hamburg Plenary)
- ❖ Reducing lead times for new as-laid cable data availability which plays into:
- ❖ A global approach to the issuance of Notices to Mariners for new cables

Challenges to be overcome

- ❖ Auditing and validating cable source data currently incorporated in ENCs and paper charts
- ❖ Gaining trust from system owners for releasing confidential cable data
- ❖ Managing potential conflicts with existing cable database custodians

ICPC & Crowd Sourcing

- ❖ ICPC does support the principle of crowd sourced bathymetric data collected as part of cable route surveys; and
- ❖ It is a stated objective under the MoU for the ICPC to provide data, or metadata, collected as part of cable route surveys, cable laying or maintenance activities, to the IHO Data Centre for Digital Bathymetry
- ❖ ICPC supported the GEBCO Future Ocean Floor Mapping Forum June 2016 where the question of crowd sourcing was raised; however
- ❖ Bathymetry data collected during a cable route survey is proprietary information and requires the consent of the cable owner for it to be included in a crowd sourced data set
- ❖ Approval to release survey data has been given post cable installation
- ❖ Data needs to be anonymized to avoid being linked to a specific cable system
- ❖ Concerns that crowd sourcing cable route survey data will compromise submarine cable protections under UNCLOS

Moving Forward

- ❖ ICPC invites the HSSC to note and comment on ICPC priorities and objectives to support the IHO/ICPC MoU
- ❖ ICPC also requests assistance and support in identifying the most appropriate HSSC Working Group or Groups that the ICPC Focus Group can interact with in order to meet ICPC stated objectives under the MoU



www.iscpc.org

Sharing the seabed in harmony