



IIC Overview and IENC Activities

Oct 13, 2015

IIC Corporate Overview: Background

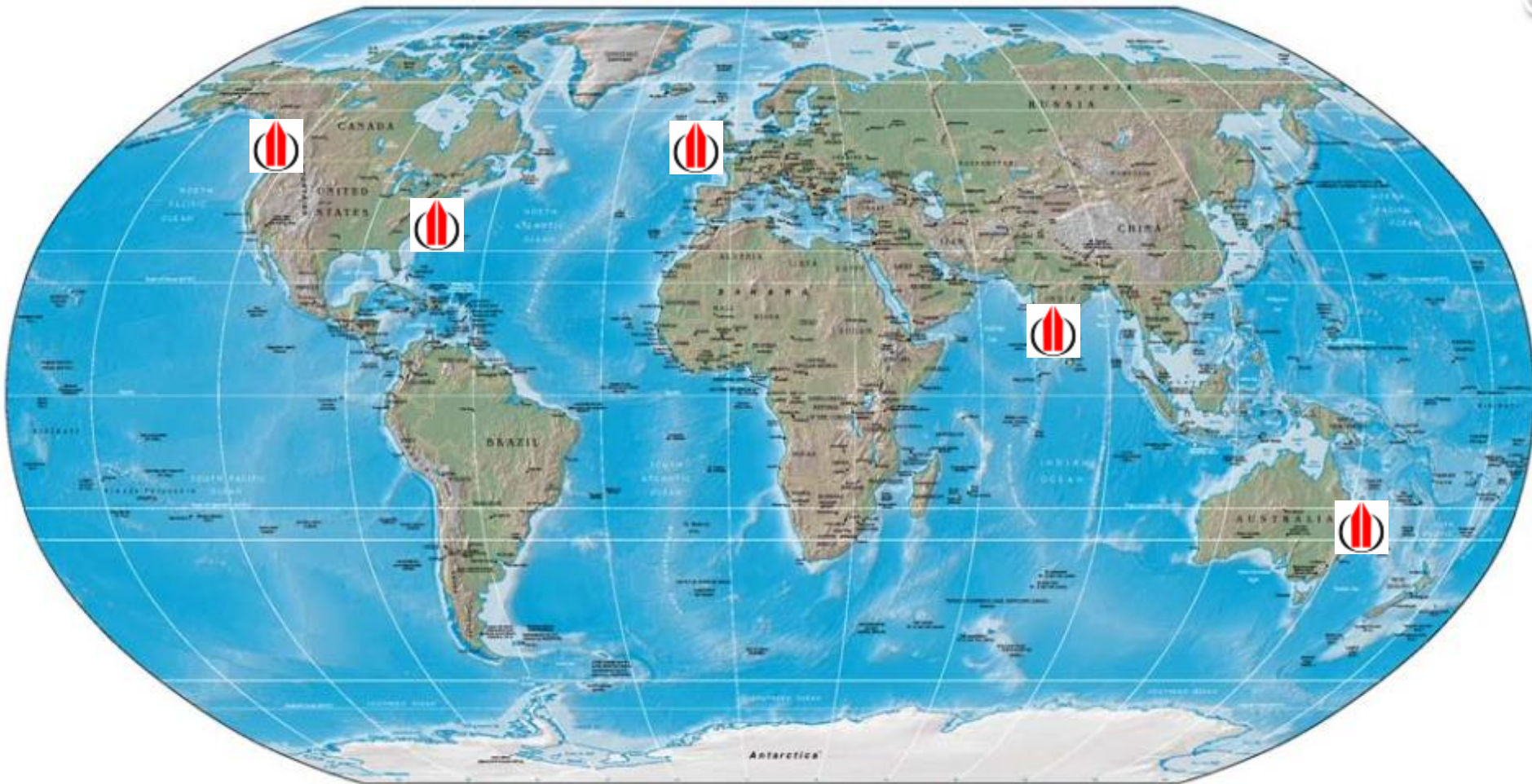


- Company Overview
 - Established in 1993
 - Over 1900 employees
 - 250 Marine Charting specialists
 - Focus on Geospatial Sciences
- A Turnkey Surveying, Mapping, and Charting Services Company
 - Over two dozen international hydrographic organizations
- Six Divisions, focused on Geospatial Sciences
 - Marine
 - Geospatial
 - Geo Surveys
 - Strategic Solutions
 - Engineering
 - Training (IIC Academy)

*Providing
mapping services
and solutions
since 1993*

*Recognized
worldwide for
quality,
professionalism
and customer
service*

IIC Corporate Overview: Locations

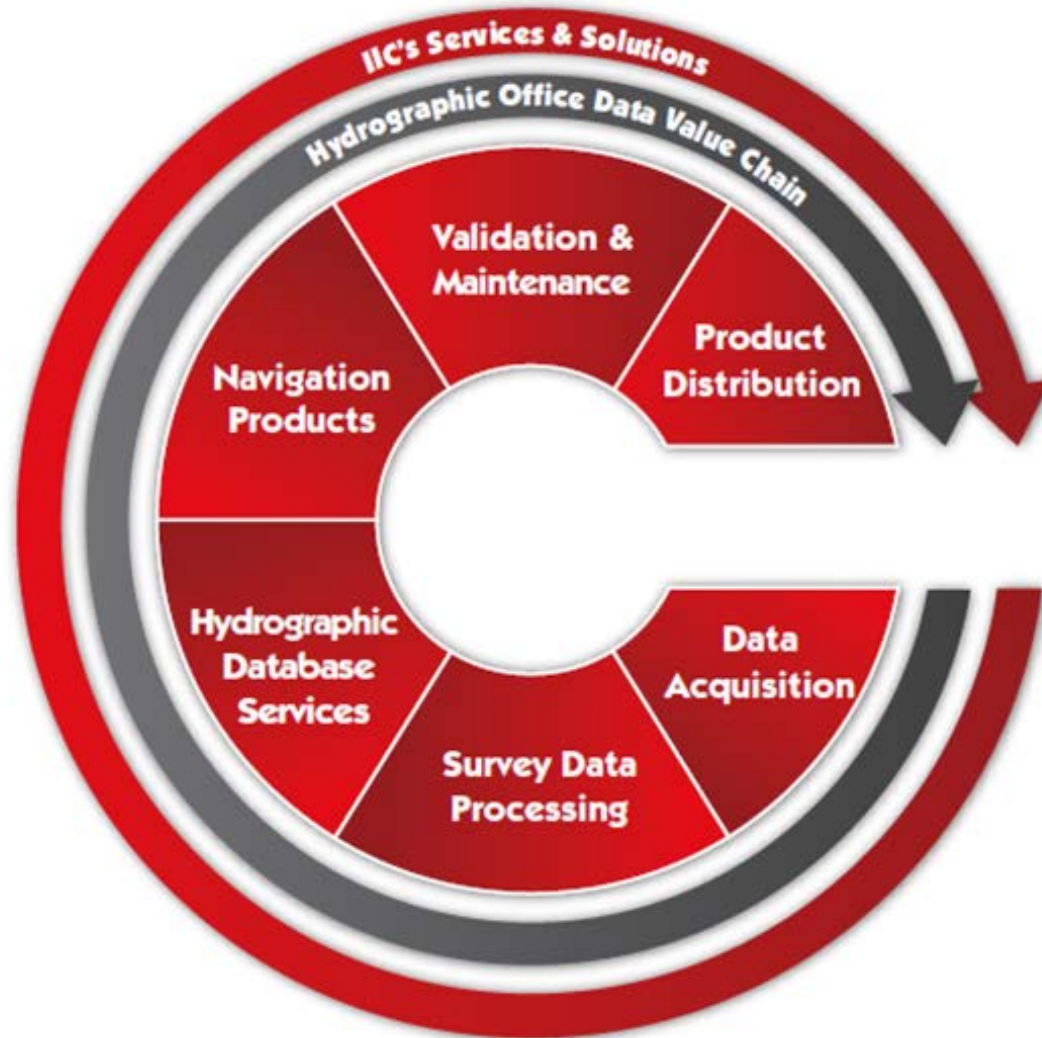


NEW PATHS. NEW APPROACHES

IIC and the Virtual Hydrographic Office



IIC Charting Services: Data Value Chain



- **Resources**
 - Hires a mix of recent graduates and those with deep domain knowledge
 - Emphasis on a large in-house training programme and a mentoring system to develop, challenge, and retain employees.
 - Utilizes knowledge matrix to match specialized expertise with project requirements
 - Leverage skills of resources across multiple offices to suit project
- **Involved in International Committees, including:**
 - S100WG, ENCWG
 - Inland ENC Working Group (IEHG)
 - International Hydrographic Organization
- **Key source of consulting services for mapping agencies (R&D)**
- **Host of “Electronic Charting Workshop”**
 - Bringing together technical managers and decision makers from hydrographic offices in a workgroup forum in Vancouver to discuss a selection of topics of shared interest.



Training: IHO/FIG/ICA Programmes

FIG/IHO/ICA International Board on
Standards of Competence for Hydrographic Surveyors
and Nautical Cartographers -IBSC



CERTIFICATE OF RECOGNITION

The FIG/IHO/ICA International Board on Standards of Competence for Hydrographic Surveyors and Nautical Cartographers, having reviewed the programme **"Marine Geospatial Information Programme (Portable Delivery)"** submitted by the **IIC TECHNOLOGIES ACADEMY (INDIA)** against the "Standards of Competence for Nautical Cartographers" S-8 (3rd edition), and being satisfied that it meets the requirements prescribed for a category **B** programme with **Specialism 2 "Photogrammetry and Remote Sensing"**, hereby awards this certificate of recognition for a period of six (6) years.

Signed at Monaco

Prof. Dr. Nicolas Seube
Chairman of the Board
This day the 17 of April 2014

Hydrographic Surveying


Nautical Cartography

FIG/IHO/ICA International Board on
Standards of Competence for Hydrographic Surveyors
and Nautical Cartographers -IBSC



CERTIFICATE OF RECOGNITION

The FIG/IHO/ICA International Board on Standards of Competence for Hydrographic Surveyors and Nautical Cartographers, having reviewed the programme **"Hydrographic Surveying Programme"** submitted by the **IIC TECHNOLOGIES ACADEMY (INDIA)** against the "Standards of Competence for Hydrographic Surveyors" S-5 Edition 11. 0.1, and being satisfied that it meets the requirements prescribed for a category **B** programme with **Option 1 "Nautical Charting Hydrography"** and **Option 2 "Hydrography to Support Port Management and Coastal Engineering"**, hereby awards this certificate of recognition for a period of six (6) years.

Signed at Monaco

Prof. Dr. Nicolas Seube
Chairman of the Board
This day the 17 of April 2014

IIC Support of USACE Programme



- Produced >10,000 km of Inland Waterways as IENCs
- Much of these IENCs are now in a seamless Oracle-based Hydrographic Database environment (CARIS HPD Source Editor and Product Editor), in Inland 2.3 Standard
- Monthly maintenance of 61 IENCs coordinated through AGC and 11 Corps districts
- Automated Marine Overlays for Southwest Passage, & Shallow and Deep water passages of the Lower Mississippi
- In 2015/2016, the production of the Arkansas and Atchafalaya River books in standardized formatting via the Hydrographic Database Product (CARIS HPD Paper Chart Editor)



IIC USACE Overview: IENC Maintenance



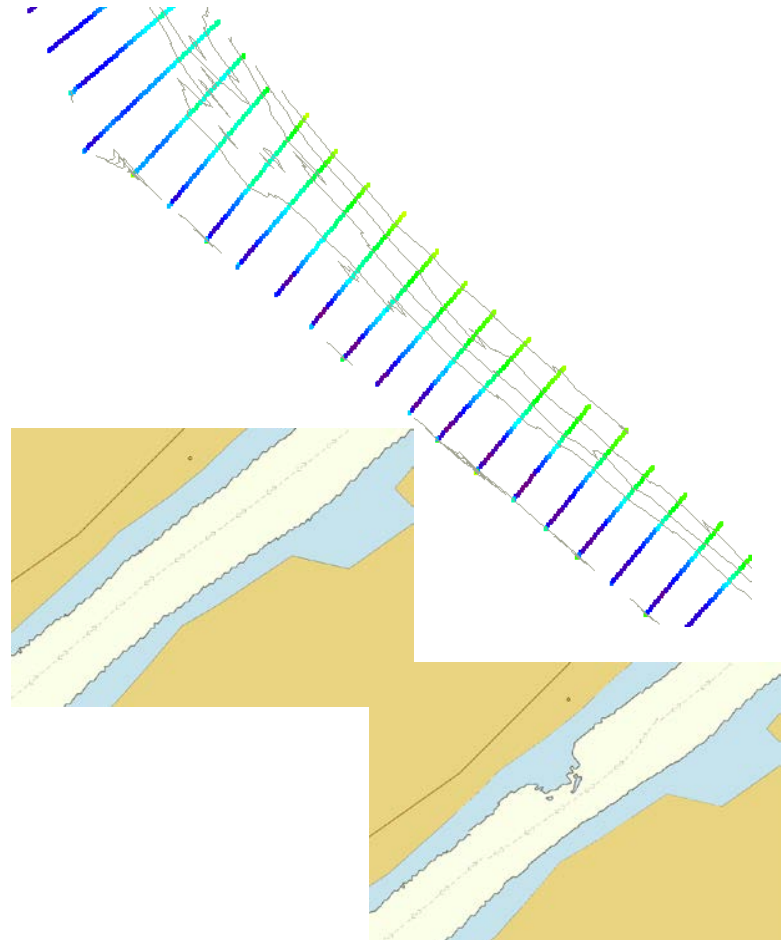
- Project handles USGS Ortho, MBES, SBES, SDS, and USCG LNtM
- Host via remote oracle server and Hydrographic Database Product that contains and maintains all sources for historical tracking
- Deliver on a monthly maintenance cycle as well as a special delivery system for emergency management operations (i.e. Ground Striking in St. Louis and Erosion Collapse on the Tombigbee Waterway.)
- Updates regularly affect Group 1 features (i.e. hydro, shoreline) as well as Group 2 features
- In addition to changes to source being recorded in Source Database, a detailed Chart History Report is updated with all changes and validation information for historical and quality purposes.



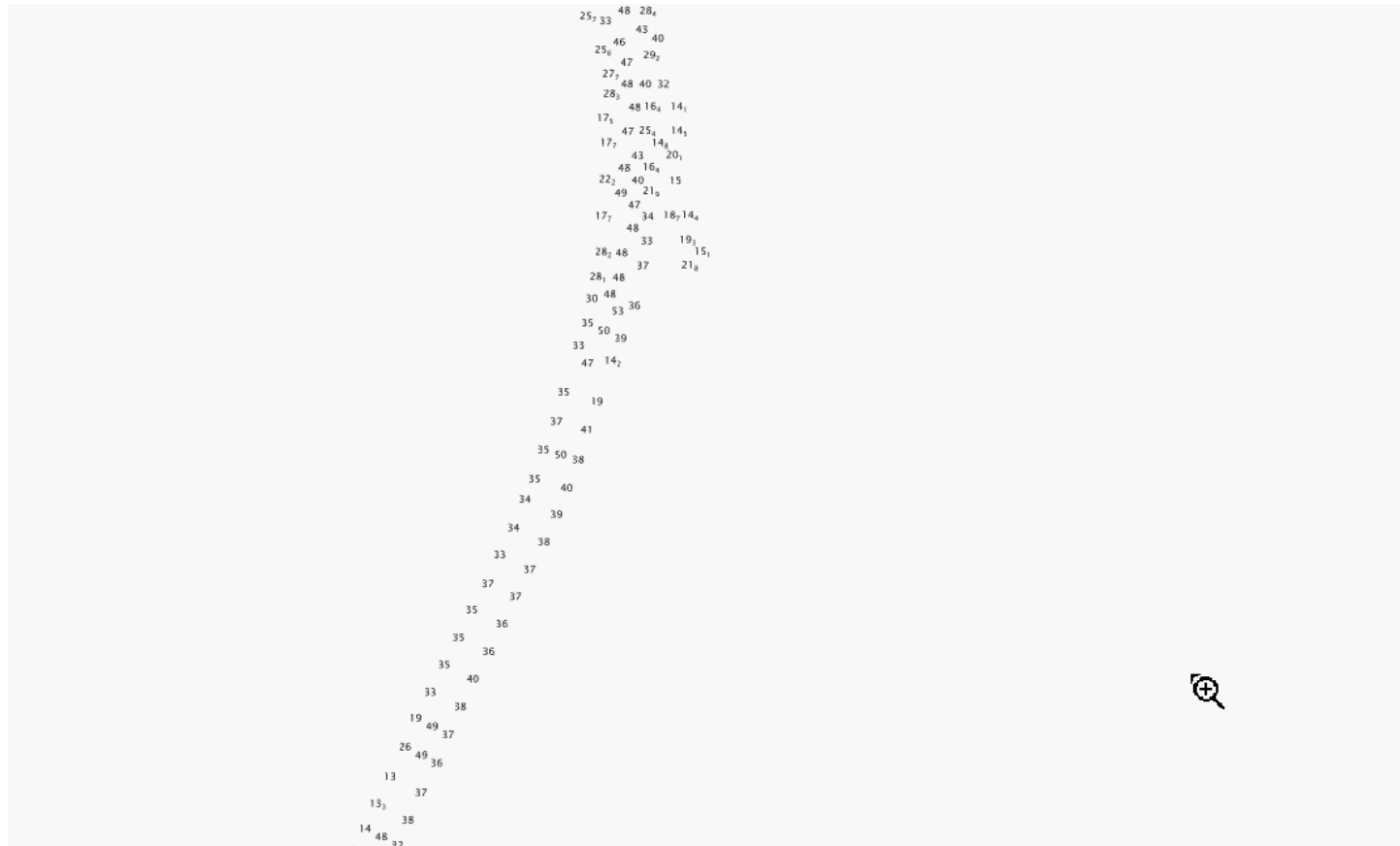
IIC USACE Overview: Marine Overlays



- Southwest and South Passage: Weekly Soundings and critical contour lines. Automated sounding SCAMIN application to allow dense sounding display at any view scale.
- Deep and Shallow Water Mississippi River: Semi regular BAG, S-57 MIO, and Geo-Tiff with soundings, critical contours, and depth value ranges
- Event Critical Charts – Tombigbee River Mile 206 bank collapse and erosion

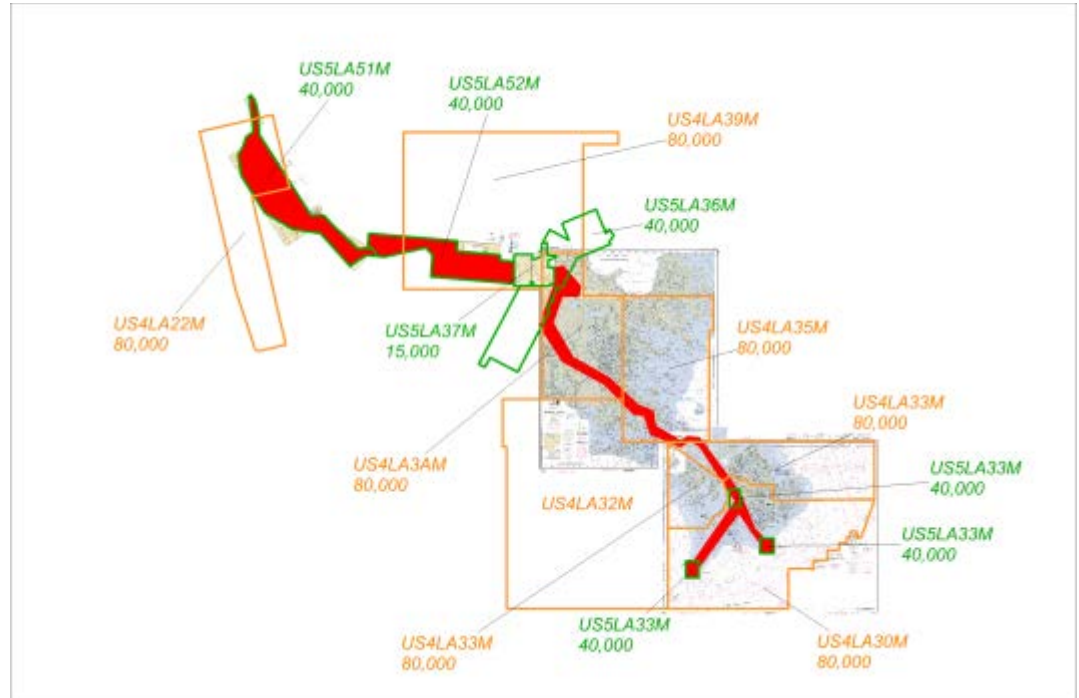


IIC USACE Overview: Marine Overlays



IIC and other Inland Efforts

- Canada
 - Fraser River Depth Overlay
 - St. Lawrence S102 Test Bed
 - Canadian Navy S102 ENC
- USA
 - Lower Mississippi ENC for NOAA
- India
 - Maharashtra State River ENC
 - Efforts to look to IEHG
- MSDI developments
 - Canada, India, Saudi Arabia
- “TSMAD” involvement (S100WG/ENCWG)
 - S-100 Test Case Scenario Development
 - Involvement on S100/S101 development



john.conyon@iictechnologies.com

www.iictechnologies.com

