EXTENDING PORT DATA ACCESS & COLLABORATION

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AGENDA

• Port and Maritime Data Systems
• Options for Extending Data Access
• User Group Perspective
• Collaboration
PORT AND MARITIME DATA SYSTEMS

- Port Management Information System (PMIS)
  - Visit Planning, Scheduling, Resourcing, Data collection, Billing, Statistics
- Vessel Traffic Services (VTS)
- Automatic Identification System (AIS)
- Weather, Hydrographical and other 3rd party data
- Security Systems Data (TWIC, Access Control, Gate Control, Cameras)
- Facilities Data (CAD drawings, Asset Management, etc)
- Financial System
- + ?
EXTENSION: MOBILE APPS

• Can be used for:
  • Assignment notification and confirmation
  • Messaging
  • Remote data collection

• Pros: On & Offline mode
• Cons: Investment ($)
EXTENSION: WEB PORTALS

• Can be optimized for various mobile h/w and s/w platforms

• Developed using familiar user interfaces
  – UX design methodology

• Specific functionality for targeted user groups

• Pro: Lower Investment ($)

• Cons: On-line mode only
EXTENSION: WEB PORTALS (EXAMPLE)

- Used to manage:
  - Agent: NOA/Berth Requests
  - Scheduler: Resource requests and confirmation
  - Finance: Billing/Invoice publication
  - Agent/Terminal: Cargo Manifest Input
  - Public Affairs: Notices/Information webpages
EXTENSION: WEB PORTAL (EXAMPLE)

Common operational picture (map-display) of port and maritime information

**HOW**
- Web presentation
- Map-based information
- Layering options
- Integration with data sources

**WHY?**
- Accessible on any computer or device
- Geographical reference for context
- Selectable view of relevant layers
- Complete representative view of the port (now and future)
PORT STAKEHOLDERS WITH MOBILE DATA INTEREST
USER GROUP: PORT STAFF

- Includes: Executive, Operations, Contracts, Business Development, Finance and…

- Requirement: Day-to-day access to information and interactive capability

- Suggest extension: Web Portals (incl. map display)
  - Maritime Domain Awareness
  - Berth Planning
  - Asset & resource tracking display
  - Camera and access system
  - Statistical Analysis
USER GROUP: SERVICE PROVIDERS

• Includes: Pilots, Tugs, Stevedores, Linesmen and other?

• Requirement: Assignment and Reporting

• Suggested extension: Web Portal and/or Mobile App
  – Job assignment
  – Remote data input

• Collaborative enhancement: Other Web Portal (map display)
USER GROUP: EXTERNAL PARTNERS

• Includes: Agents, Terminals, Shipping Companies, etc.

• Requirement: Access and interaction with Port’s PMIS

• Suggested extension: Web Portal
  – NOA/Berth Application
  – Resource requests
  – Permit requests
  – Cargo manifests
  – Invoices
USER GROUP: PORT SECURITY

• Includes: Port Security, DHS, Police

• Requirements: Reporting, threat awareness, response coordination

• Suggested extensions: Mobile App & Web Portals (incl. map display)
  – Security Job assignments and reporting
  – Ship location data
  – Asset & resource tracking
  – Visit details from PMIS
  – Camera and access systems display
  – Building drawings and other infrastructure details
USER GROUP: OTHER AGENCIES

• Includes: Customs, Coast Guard, Navy, Fire, Ambulance

• Requirement: Awareness and response coordination

• Suggestion extension: Web Portals (incl. map display)
  – Ship location data
  – Visit details from PMIS
  – Camera and access system display
  – Building drawing and other infrastructure details
USER GROUP: WIDER PORT COMMUNITY

- Includes: External and Internal communications
- Requirement: Connect with wider port community to provide information relevant to their needs
- Suggested Extension: Web Portals
  - Notice to Mariners
  - Special events advisory
  - Provide real-time update of port activities
    - Vessels in port, arrivals/departures, press events
  - Targeted information for specific community groups
INCREASED DATA ACCESS = IMPROVED COLLABORATION

Providing mobile and local data access facilitates:

- Stakeholders sharing common data
- Immediate access to relevant information
- Increased knowledge and awareness

- Result: Efficient and Effective Port Operations
CONTACT DETAILS

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