



photo: LHG

Process Integration in the Maritime Industry

# VERS in Use at the Port of Lübeck

By Christoph Cenowa

The Lübecker Hafen-Gesellschaft mbH (LHG), with about 1000 employees, operates the public ports in the Hanseatic City of Lübeck, making it Germany's largest port operator on the Baltic Sea. Not only are 30 million tons of goods transported every year, but also about 300,000 passengers use the ferry connections to Scandinavia and the Baltic. LHG is successfully continuing centuries of Lübeck's tradition as a central hub in the Baltic Sea economic region.

Continual growth is bringing LHG new challenges. In the future, the IT systems must be capable of handling the increasing logistic requirements and gain even more flexibility. Thus at the start of 2006, LHG asked MaK DATA SYSTEM to design a new orientation of the IT architecture and technologies and to implement a prototype of the passenger information system of the planned Integrated Ship Management system.

This passenger information system (project name IHS-ISM), familiar from airports and train stations, displays the current arrivals and departures of ships on large flat-screen monitors. The advantage compared to traditional schedule information is that IHS-ISM can display both the planned arrival time and the actual one. This is done using an interface to the Vessel Event & Report System (VERS) developed by MaK DATA SYSTEM and in use at LHG.

With one antenna each on the Scandinavian Quay in Travemünde and on the Nordland Quay in downtown Lübeck, VERS covers the entire Lübecker Bucht, the Trave river, and the municipal region. The AIS signals received from ships are processed by VERS and transmitted to IHS-ISM using a SOA-based interface. The following information is currently extracted by VERS and displayed by IHS-ISM:

Ankünfte		Skandinavienkai		Donnerstag, 8. März 2007 11:19		
Schiff Name	Reederei	aus	Anfahrtszeiten		Anleger	Status
			geplant	erwartet		
MS Robin Hood	TT-Line	Trelleborg	10:00	09:49	5	
MS Stena Freighter	Stena Line	Göteborg	09:30	09:54	3	
			11:00	11:08	5A	
			16:00			
			17:15		6A	
			19:00			
			09.03.			
			00:15			
			09.03.			
			01:00			
						gemacht  beladen / entladen

  

Abfahrten		Skandinavienkai		Donnerstag, 8. März 2007 11:21			
Schiff Name	Reederei	nach	Abfahrt		Einschiffen von / bis	Anleger	Status
			geplant	erwartet			
MS Lübeck Link	Finnlines	Malmö	10:00		bis 09:00	7	
MS Peter Pan	TT-Line	Trelleborg	10:00			6A	
MS Finnarrow	Finnlines	Malmö	16:00		bis 15:00	5A	
MS Robin Hood	TT-Line	Trelleborg	17:15			5	
MS Finnansa	Finnlines	Helsinki	19:00		bis 16:00 bis 16:00 bis 17:00	6	
MS Stena Freighter	Stena Line	Göteborg	20:00		bis 18:00	3	
MS Finnmill	Finnlines	Turku	21:00				
	Finnlines	Malmö	22:00				

Overview about all actual arrival and departure times

- estimated times of arrival with about an hour's notice and accuracy to about five minutes
- identification of the ship, should several ships be servicing this arrival as a regular line
- time and position of docking
- departure time

With LHG's move to their new office building in September of last year, the IHS-ISM prototype was put into productive operation. IHS-ISM has resulted in a great deal of positive feedback, not only from passengers but also from the shipping companies.

This initial success of VERS and AIS-supported business processes at LHG will be continued, since MaK DATA SYSTEM is currently working on the implementation of the IHS-ISM port log book. This automated recording and logging of all ship movements will help ensure that Lübeck remains a central hub in the Baltic Sea Region in the future.

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