

HYDRO INTERNATIONAL INTERVIEWS HOLGER KLINDT

Hydrography in a Wider Context



Modern Hydrography needs to be embedded in the much wider context of geographic information gathering and dissemination. This message will be broadcasted during Hydro2010 in Rostock, Germany in November this year. Besides this ever growing role of hydrography, other "hot topics" at this conference will be the Baltic Sea Region and the European Waterways Network. Holger Klindt is chairman of the German Hydrographic Society (DHg). DHg organises the yearly hydrographic conference under the umbrella of the International Federation of Hydrographic Societies. The role of hydrography is growing substantially and the hydrographer is becoming a linking pin in the wider community active in ocean monitoring.

What will be hot topics during Hydro2010 in Rostock?

We attempted to catch the unique position of Rostock, and Germany as a whole, and therefore identified two hot topics that are focal points in the policy of the German Hydrographic Society. The first one is very much attached to the location of this year's conference: the Baltic Sea Region. The second is linked to the central position of Germany within the European Waterways Network, comprised both of coastal feeder routes but also the inland waterways of Germany, the canals and rivers that form a central part of the web with links to all parts of Europe.

What is the importance of the Baltic Sea?

The Baltic Sea is a confined ocean, shallow but dynamic and very busy with shipping routes throughout the area, mainly along the coast, together with the recent pipeline construction, of the Nord Stream, interfering with that. The policy making with regards to the sea is subjected to strict environmental rules stemming from HeLCOM, a governing body of the 'Convention on the Protection of the Marine Environment of the Baltic Sea Area'. But it is not only in the Helsinki Commission (HeLCOM) that countries are working together, all the states bordering the Baltic are intertwined in complex bilateral and multilateral agreements that lead to an extremely densely knotted web of regulations on the subjects of shipping, offshore constructions, fisheries and marine tourism.

The other hot topic you are identifying is 'inland waterways'. Can you explain?

Inland waterways, canals and rivers are extremely important for the logistics chain in the whole of Europe. Germany, as one of the bigger states in the middle of the continent, is linked through waterways to the borders of Europe, the main ports of Amsterdam and Rotterdam in The Netherlands, and far into France, but also to the southern and eastern hinterland. Those waterways are the only sustainable transport means still having significant growth potential. To mitigate existing transport risks it will be necessary to extend existing hydrographic co-operations for the provision of safe and reliable hydrographic information, carried out by professionals, to avoid any risks for ships and infrastructures on the rivers and canals. Inland hydrography is often overlooked, but plays a central role in the safe and efficient conduct of European logistics operations.

With regards to both above mentioned topics, you are stating that hydrography needs to reach out. What do you mean by that?

In both examples one can see that hydrography plays an extremely important if not the central role. For the Baltic Sea, for instance, hydrography will be the primary field for all ocean monitoring activities. Data about the seabed are very much the basis for all further development activities, and no longer just the basis for nautical charts. Various systems in different spots of the Baltic are in operation today monitoring the sea at all times. The highly dynamic sea bottom requires regular updates, take, for instance, shipwrecks or still existing World War II ammunition subject to that dynamic environment. We are in the middle of it all. But I have to be honest, there is still a lot of work left before we manage to position hydrography in public perception as the main contributor to ocean monitoring.

Why would the DHg in particular and Germany in general be a good example in this?

Any marine activity in Germany both inland but also at the two oceans bordering our country is subject to intense consultation and

co-operation with our European partners. Historic conflicts about the management and utilisation of these waters have in modern Europe led to the development of a stable platform of 'marine communication and co-ordination'. The DHyG recognises this importance, through its place and concern about the Baltic Sea Region and the necessity for the ever increasing co-operation of all the countries surrounding it. Just to give you an example, DHyG is organising workshops and parliamentary evenings with the aim of spreading our 'hydrographic mission' beyond the hydrographic community towards decision makers and policy makers at national level. We believe that DHyG, because of its central geographic position and its extensive experience in regional hydrographic co-operations, is an ideal partner for many other coastal states, being able to offer a world of experience and knowledge in making our waters safer, cleaner and prolific.

The whole profession is suffering from a lack of influx of young people, how do you look upon that?

I know that universities and colleges are offering excellent education programmes, also in our discipline. So, my concern is not so much about programme details, but it is much more about the marketing aspects. How do we bring the fascination of and our own dedication to our hydrographic work to young people and the public in general? Therefore I would not dare to criticise any educational programs. Instead, I think that we, as learned societies and industry, should reconsider our own contribution. The International Hydrographic Summer Camp arranged by the HafenCity University Hamburg is a wonderful example of how this could be achieved in a close co-operation between universities, industries and individuals from hydrographic associations like DHyG. I think it would be fantastic if we could convince more experienced individuals to contribute personally in attracting more keen, young people to our fascinating profession. Modern IT tools such as personal websites, blogs, wikipedia or Google Oceans provide a wide variety of efficient and easy-to-use means to 'spread the word'. Selling hydrography as just another technical study is difficult, as experiences in other technical fields have shown. Hydrography is a fascinating subject with a world of opportunities. This is what we need to preach.

What will be the main challenges for the industry in the upcoming years?

Most of the 'hydrographic sensor technologies' are in their mature stage. In the years to come we will still see significant developments in such technologies, but I think the underlying physics does not leave much space for further quantum leaps. What we do see, however, is an enormous progress in the process of data analysis, data fusion and dissemination. The development of the new S-100 IHO Geospatial Standard for Hydrographic Data is a good example. By using ISO-developed components and terminology the hydrographic world now joins the mainstream of the geospatial information industry. This will help to encourage a much wider acceptance and utilisation of hydrographic data. Still the questions remains, what is it good for? Again, an example might shed some light on this potential. Within the recently finished EU research project EFFORTS the Hamburg Port Authority, in co-operation with various European partners, demonstrated the potential of combining various port-related information including high-precision navigation data for the safer and more efficient conduct of modern port operations

Hydro2010 will surely be the place to come and learn more about these challenges, not only for those Hydrographic Societies gathered in the International Federation of Hydrographic Societies, but also for any other groups or individuals keen to learn more about modern hydrography and the challenges we are facing.

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