What are the basic characteristics of the present finance model?

In year 2009 a new set of directives set by the Danish Ministry of Finance have been implemented regarding the general financial model for the activities of KMS. The new financial model includes new principles that involve the following changes:

- A change from partly financing by the end-users and partly by the government for all categories of our basic database collections to a full governmental or end-user financing for services across all database collections.
- 2. A yearly subscription from all Danish ministries and municipalities that enable access to the majority of all our database collections for the entire ministry/municipality.

The new directive means that KMS does not anymore has to enter into negotiation with each individual ministry and municipality for the use of our products and services due to the yearly subscription. In stead our focus will be to offer professional advice about how to use our products and services within each administration of the organization.

For other users of our products and services there will be no changes to the previous policy i.e. public owned companies, private companies and citizens will still have to pay. However the new directives enable that those of our categories of database collections and services that will be financed 100% by the government will be free of charge whereas the remaining categories and services in principle will require 100% funding by the end-users.

I enclose a spreadsheet that in general terms describe how the new model are constructed and which part of KMS activities that shall be financed 100% by the government and which products and services that require payments by the end-users.

What is the influence of the European directive PSI and INSPIRE on your present finance model?

There is a series of cost related to the establishing and maintenance of the national geographical infrastructure. The establishment requires investments and the ongoing maintenance of data has to be financed besides that funds for research and development needs to be available if the society shall benefits from the new possibilities that the new technology among others may contribute with.

The financing of the investments and the ongoing maintenance of the geographical infrastructure is a continual problem. Standardization and harmonization of terms of concepts and IT technology is a premise for an effective infrastructure however such activities have related costs involved.

Such costs have to be spending before the savings may occur due to the period of time needed before the implementation of such work can be measured in terms of effectiveness.

It is the data owners who have to pay the direct cost involved whereas the benefits by the end-users take time to be realized.

The end-user may alternatively be tempted to seek more cheaply non-standardized solutions that do not take part of the common national geographical infrastructure. If the usage of the common infrastructure shall be promoted with the aim to achieve an effective societal use of resources it will be necessary to have a certain degree of financing by the end-users.

It is well-known that the position of the European Commission and the European Parliament is that the common geographical infrastructure should be made available free of charge for the public. However it has been decided by the Danish politicians that Denmark wants to maintain the possibility to charge a certain degree of financing by the end-users. A solution may possibly be that some viewing services will be free of charge for private purposes whereas download of data with commercial purposes may require charging of fees.

National mapping services free of charge

Based on the implementation of the Danish Law of the European directive PSI and INSPIRE KMS has decided to make some of our products available free of charge on our website for private purposes. Some of these products may be categorized as "viewing services" whereas others have the facility potentially to be copied to a personal computer and/or ready to be printed.

The free of charge products and services include modern and historical topographical mapping products, cadastral mapping products and aerial photos. No nautical charts products are included on this website until further.

What are the basic considerations for the wholesale and retail prices of the SOLAS products?

Paper charts and nautical publications

It is the view of KMS that our paper charts and nautical publications may be regarded as end-user products not suitable as such for value-added information.

These products are therefore sold via our main chart distributor that follows KMS recommended retail prices.

Electronical Navigational Charts (ENC)

Contrary to the analogue products above KMS has decided not to fix a recommended retail price for our ENC product because it may be subject for some value-adding and be part of an integrated service by the different actors in the distribution chain from the PRIMAR RENC to the end-users.

The benefits of the wholesale pricing concept are that the hydrographic office (HO) leaves it to the commercial actors to decide the value of the ENC product and the "market price" shall be monitored by the on-going competition between the distributors.

The disadvantages are among others that often the HO is accused by the end-users to set the price for his ENC product too high though the HO share often proves to be less than 10-15% of the price he has to pay. There is further the risk for the HO that if he decides to lower his wholesale price the end-user price may be stable i.e. that the margin for the distributor may be increased.

It has been considered to make the wholesale price of our ENCs public but such ideas have been strongly argued against by the distributors.

To fix a recommended retail price of the ENC and make it public has also been considered because in this way the HO may control the price level in the market and the distributors will have to compete within a

specific margin. On the other hand to take into consideration the pricing of third parties value-adding and their integrated services will be impossible for the HO to decide.

What kind of opportunities and threats do you foresee if the Netherlands free licensing initiative will be followed by NLHO?

It will create a loss of revenue for the NLHO unless the government will be willing to compensate such losses 100%. It may further create some pressure by the industry towards other European HOs and claim to use the Dutch example as consideration for a national revision of its pricing policy. In the case of Denmark such claims will be considered as being in conflict with the new national financial directives KMS is obliged to act on.

Free access and use of ENCs may have a negative effect on private data producers' willingness to develop innovative integrated solutions if the end-users are not willing to pay such extra cost.

In theory a free access and use of ENCs may be considered as a way to increase safety at sea but at least for the leisure craft market it will be a prerequisite for such a goal that the ECS software developed by the industry is able to adopt the S63 format or any of the existing SENC formats.

Financial model for National Survey & Cadastre (KMS)

Danish Hydrographic Office is part of this organization

External common cost Governmental Economi Center Governmental IT Revision and Ensurance									Cover those elements of cost that shall be considered in our price calculations but are exclusive our granted budget	
Governmental Economi Center	Governmental IT			Revision and Ensurance				C	calculations but are exclusive our granted budget	
General management and adminiostration	Internal common cost Seneral management and adminiostration Support functions Financial posts								Cover costs that are not directly related to professional activities but are shared according to the number of manpower	
-								7		
Basic governmental tasks								← [Cover cost related to governmental funded governmental tasks	
Advisory of Minister and policy Laws and rules	International Governmental tasks Governmental related advisory			Historical documentation / archive General service of citizens						
The Geographical infrastructure of the Danish Defense								Cover the special contract between KMS and the Danish Defense regarding the military mapping and its general contribution to the national geographical infrastructure		
Geographical infrastructure									The geographical infrastructure consists of the infrastructural frames and	
Infrastructuctural frames and management Infrastructural data og functionality									infrastructural elements.	
Standardization Interoperationality Data modellings / IT-architecture Contract management Agreements regarding mutual free dataaccess Coordination	GNSS-stations Metadatabase services Transformation services Management of end-users and rights Zone of development - Preparatory of	Reference Network	Metadata	Specification Order / tender Following-up of deliveries Data collection Data manipulation Quality ensurance Data integration Data distribution Web services Database operation Database functionality/application	Topographic	Cadastral	Reference Network		The infrastructural frames concists of both activities that are specifically related to those geodata that KMS are responsibel for and activities that support generally all geodata and structures that are part of the entire collection of the geographical infrastructure. These activities are funded by the government. The infrastructural elements consists of data and functionality including webservices that are specifically related to such data. It includes topographical, maritime and cadastrel data as well as geodetic reference data frames. Funded by end-users and for governmental end-users paid via an yearly contigent. However the nautical charts requires only partly end-user payment. Specific needs of governmental collaborations that may cause costs in	
Zone of development - Freparatory coordination									the starting phase.	
Governmental co-operation								,	Bounded collaborations between governmental authorities with the aim	
Mandatory Cadastrel administration	Contractural FOTdanmark (municipality cooperation) MGCP (NATO projects) KMS contribution								to solve specific governmental tasks that are given by law, e.g. cadastrel administration. Such tasks are funded by fees. Contractural cooperation between authorities where geodata are involved with the aim to strengthen the solution of the governmental tasks. These are normally funded by end-users however there might exist agreements	
Boundary and Mary								1	that mean KMS has to contribute partly with governmental funding.	
Activities covered by governmental funding Cadastrel survey informations Distribution of archives	Commercial activities in competition Surveying tasks Consulting Sale of maps, charts and geodata Consulting							←	Rest of activities that do not belong to the geographical infrastructure or governmental collaboration but may be considers as part of KMS' funtion. All cost related to such activities have to be balanced whereas activities that can be related to a potential competition are accepted to be priced with a potential surplus at the bottom line over a period of years.	