

# S-100 and type approval

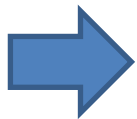
Implications of S-100 based data  
products on type approval

A discussion

## Current situation with S-57

Software changes are required when:

- A new data product should be supported
- The version of an existing data product has changed
- The presentation rules have changed for an existing data products



Software updates are required for existing systems.  
New type approval will be necessary.

## Plug & Play concept of S-100

An S-100 compliant data product can be read and displayed by a system even when system was compiled and type approved before the data product was defined.

This will be achieved by:

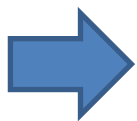
- machine readable feature catalogue
- machine readable portrayal catalogue
- identification mechanism for data products

## Plug & Play concept of S-100

**No** software updates are required for:

- new data products (compliant to S-100)\*
- new versions of data products
- amendments to the portrayal catalogue

\*As long as the data product requires no new functionality  
(only loading, display and querying)



This allows to bring information faster to the end user  
what is the reason to create them.

This is also great cost saving benefit for the ECDIS  
manufacturer.

## What is the price?

The feature catalogue and the portrayal catalogue will come as machine readable data.

The portrayal catalogue may contain code or rules that corrupt the ECDIS or downgrade the performance of the portrayal. The software manufacturer will not have the full control on this.



How can we make sure that the new product or portrayal catalogue behaves properly in the system?  
Are there any implications on type approval?



## Our point of view

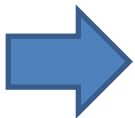
- No renewal of type approval is required.
- The producer of the data (data product) should take responsibility and guaranty that the data is compliant and behaves properly.



How can this be verified?  
Who will it do?

## Test data, the key?

- A test data set with typical content for the data product allows tests on existing systems.

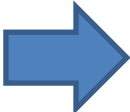


Will that be sufficient?  
And still, who will it do?

## Plug & Play reloaded

The whole concept of Plug & Play can be ruined if the product is bundled with non S-100 standards. Especially proprietary security schemas can be a large problem since the system will not be able to know them in advance.

What can be the solution?

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- A new section in S-100
  - A generic security schema that will work for all products.
  - Get rid of them and allow the data distributors to deal with this topic.



# Thank you for your attention



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