

**Paper for Consideration by S-100 WG/ENCWG****ENC update number limitation**

<b>Submitted by:</b>	PRIMAR
<b>Executive Summary:</b>	S-57 and S-101 ENC update numbers are today limited to 999. In the future there will be S-100 derived products with extensions .101, .102, (.nnn). To avoid confusion and additional complexity for service providers and end user systems a solution to avoid this should be found.
<b>Related Documents:</b>	S-57 Appendix B.1 - ENC Product Specification, S-101 (Draft 0.0.2) Product Specification, S-102 Draft Product Specification 2.0.0
<b>Related Projects:</b>	

**Introduction / Background**

S-57 ENCs are today theoretically capable of containing 999 updates, ref S-57 Appendix B.1 - ENC Product Specification 5.7.

S-101 ENCs will be capable of containing 999 updates, ref S-101 (Draft 0.0.2) Product Specification 11.3.2

S-102 will use .102 as extension for new editions, ref S-102 (Draft ver. 2.0.0) Product Specification 11.2.

If S-100 derived products shall use their product specification number as file name extension there are possible conflicts with all future S-100 products as well.

When implementing support for future S-100 derived products, file extension probably will be used to separate the products from each other in distribution and end user systems.

As of today, PRIMAR have received S-57 updates with numbers 101, 102 and 103 for distribution.

**Analysis/Discussion**

A situation where file extensions for one product could be mixed with another product should be avoided. Such a situation occurs when we look at an S-57 ENC update number 102 and any S-102 dataset. The same would be the situation for any S-57 update having the same update number as an S-XXX product using the product specification number as file name extension.

As far as we can see, there are two solutions to this problem:

1. Restrict S-57 and S-101 updates to no more than 99 before issuing a new edition.
2. Avoid that S-100 derived products contain extensions equal to their product specification number.

We would prefer to solve this by using option 1, as this would prevent more complexity being added in the S-100 family to find another solution as to how the end user systems distinguish between the different products.

Based upon current experience with S-57, the data producers do not often produce 100 updates or more of their product before issuing a new edition. Therefore this restriction would probably not add to much extra work for data producers.

**Conclusions**

In order to avoid file extension conflicts between S-57/S-101 updates and other S-100 derived products, we suggest amending S-57 and S-101 product specifications to restrict the number of updates to be no more than 99 before issuing a new edition.

**Action Required of S-100WG/ENCMWG**

The S-100WG/ENCMWG is invited to:

Note this paper and discuss whether proposed solution is acceptable.