

A close-up, high-angle view of a circular gauge or dial with a blue needle pointing towards the word "QUALITY" written in large, bold, blue capital letters. The word "QUALITY" is the most prominent feature, with "TY" visible to its left. The gauge has a dark, metallic-looking surface with fine tick marks around the perimeter.

QUALITY

Assessment • Certification • Expert Opinion

A dark blue background with a faint, light blue compass rose or starburst pattern in the bottom left corner. The text is centered in a white, bold, sans-serif font.

UAS providers' concerns, risk, impact, successful prevention, cost savings

11.08.2022 Presentation by NavCert GmbH, Notified Body 2603

UAS providers' concerns



- Drone can not be traded within European Economic Area as per January 2024
- End-users may no longer operate their Drone in EU
- Drone will not pass mandatory conformity assessment
- Drone does not comply
 - with EU regulation
 - with the latest standards
- Drone does behave strange in critical scenarios
(many not addressed in the standard, responsibility by manufacturer)

Root cause:

- wrong spec.
- conformity test failed
- critical scenario behaviour

=> wrong development

=> re-design

=> call-back

=> liability claim

=> re-design

provider's risk:

=> re-design => additional cost

=> delay market introduction

=> lost revenues

=> additional cost

=> delayed sales start

=> lost revenues

=> additional cost

=> lost image => lost business

=> additional cost

=> additional cost

=> delay => lost revenues

UAS providers' monetary risk impact (estimation)



Rough Risk estimation:

- re-design duration => from 6 to 8 weeks (best case) or up to 6 or more months
- conformity test duration => 8 to 12 weeks (neglecting lead times and resource availability)
- lost Revenue => in case of 4 Months delay

=> **>33% or more annual revenue lost!!**

- **EXCLUDING additional cost** arising from:
 - re-design
 - certification (mandatory conformity assessment)
 - potential claims

NavCert minimizes UAS suppliers' Risk & Cost



Risk

- erroneous specification and documentation
- conformity test fails (erroneous implementation)
- critical scenario behavior (erroneous implementation)

Successful Mitigation Measure

- Gap Analysis => missing spec. / standard (delegated regulation and latest version of standard series)
- Gap Analysis => missing spec. / standard
- Pre-Testing => early alert misbehavior
- Gap Analysis => missing spec. / standard, incomplete risk analysis
- Pre-Testing => early alert on misbehavior

Who is NavCert?



- Founded 2006
- Since 2012 GNSS accredited laboratory (first in Europe)
- 2022 formal nomination as Notified Body (NB 2603) by the German Federal Aviation Agency (Luftfahrt-Bundesamt – LBA) to perform UAS assessment required per DR 2019/945
- Chair coordination group notified bodies for UAS under the Drone Regulation (EU) 2019/945
- Member of standardization bodies (DIN, ETSI, IEEE and by delegation to CEN and ISO)
- Actively driving finalization of the harmonized European standard EN 4709 series within ASD-STAN D5/WG8



Accredited Certification Body and Notified Body (NB 2603)

- Category open, all classes (C0-C6) and add-ons
- Multi-copter and fixed wing drones
- All communication links and protection methods
- Testing according to EN 4709-Series



Certification



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Link: [NavCert is now formal Notified Body for UAS - NavCert GmbH](#)