R6 SUPREME components

- R6 SUPREME system includes
  - R6 SUPREME Transponder
    - IEC 60945 protected
    - IEC 61993-1 Class A AIS
  - R6 CDU
    - IEC 60945 Exposed front (in panel mount)
    - IEC 60945 Protected in gimbal mount
  - GNSS Antenna options
    - Same antennas as R5 systems
    - One new GNSS antenna option
  - VHF Antenna options
  - R6 Junction box
    - Passive box for DSUB to Screw terminal conversion

New Control and Display Unit (CDU)

- 7" LCD panel with touch interface
- Functional keys
  - Power + Dimming/Backlight toggle
  - Custom keys
  - Home key
- Waterproof front (requires panel mount)
- Dual IEC 61162-450 Ethernet interface
- Rear facing SD-card slot
- DSUB-9M with 61162-2 interface
  - Fits AIS pilot plug accessory cable
- Gimbal or panel mount

Draft design

R6 SUPREME Transponder

- All new SDR-radio design
  - Class A AIS
  - VDES prepared
    - ASM channels
    - VDE-TER channels
    - VDE-SAT channels
    - Up to 307.2 kbps raw data
- Multi system GNSS receiver
  - Supports all GNSS systems
- Dual Ethernet for redundant networks
- WEB-GUI replace R5 Utility SW
- FW upgrades from CDU or WEB
  - Fixed factory fallback FW in case of upgrade failure
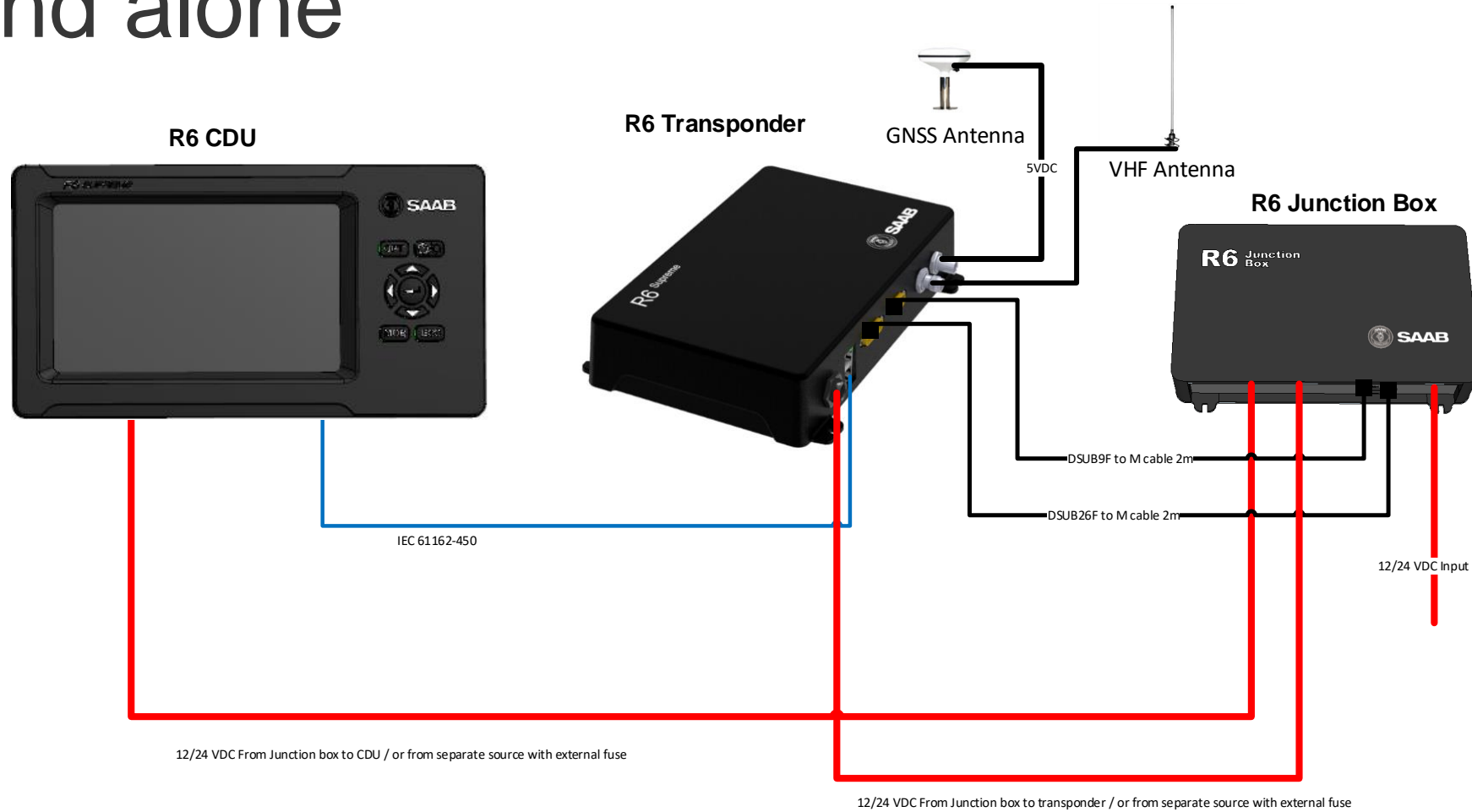

Draft design

SAAB

R6 SUPREME Transponder interfaces

- Dual IEC 61162-450 Ethernet interface
  - Redundant networks
- 1 x DSUB-26M with serial and other I/O
  - Fits R5 AIS and R6 junction box
- 1 x DSUB-9M with single 61162-2 interface
  - Same pinout as CDU
- 1 x power connector
  - Fits R5 AIS power cable

Interconnection diagram example
Stand alone

R6 CDU

R6 Transponder

GNSS Antenna

5VDC

VHF Antenna

R6 Junction Box

DSUB9F to M cable 2m

DSUB26F to M cable 2m

IEC 61162-450

12/24 VDC Input

12/24 VDC From Junction box to CDU / or from separate source with external fuse

12/24 VDC From Junction box to transponder / or from separate source with external fuse

Interconnection diagram in network

R6 CDU

R6 Transponder

GNSS Antenna

VHF Antenna

R6 Junction Box

5VDC

DSUB9F to M cable 2m

DSUB26F to M cable 2m

12/24 VDC Input

IEC 61162-450

Network A

IEC 61162-450

IEC 61162-450

Network B

IEC 61162-450

12/24 VDC From Junction box to CDU / or from separate source with external fuse

12/24 VDC From Junction box to transponder / or from separate source with external fuse