

Return address: P.O. Box 15, 9822 ZG Niekerk, The Netherlands

ATCB  
Attn.: Mr. Timothy R. Johnson  
Examination Engineer  
6731 Whittier Avenue, Suite C110  
McLean, Virginia 22101  
USA

Smidshornerweg 18  
P.O. Box 15  
9822 ZG Niekerk  
The Netherlands

www.tuv-eps.com

T +31 594 505005  
F +31 594 504804  
E info@tuv-eps.com

**Subject**  
Comments

**Date**  
March 13, 2008.

**Our reference**  
17\_W6O-102030A  
\_comments-and-answers

**Your reference**  
ATCB022009/2

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Dear Mr. Johnson,

Related to your comments based on our request for certification for the following product,

FCC ID : V4Q-102030A (has been changed into: W6O-102020A!!)  
Brand : NOFIQ Systems BV  
Model : N20-HUB  
Description : 2.4 GHz IEEE 802.15 ZigBee Fire control & indicating apparatus

we would like to provide you with the following information:

**Question 1:**

*This application has been submitted for grantee code "V4Q". However currently the FCC site cites:*

***"There are no grantees on file that match the search criteria specified.  
Grantee Code: V4Q"***

*This issue needs to be resolved quickly. Many times this may mean the grantee code is lost and they may need to obtain a new one. This may affect many of the documents provided. Please review*

**Answer 1:**

The grantee code has been changed due to the fact that the applicant did not pay the previous registered Grantee Code. Grantee code has been changed from V4Q into W6O. All Documents have been modified and a new package of documents with correct FCC ID have been uploaded.

**Question 2:**

*The block diagram should show the frequencies of all oscillators in the TX device (CFR 2.1033(a)(5)). Please provide as the current block diagram is only for an upper level diagram*

**Answer2:**

The new and adjusted block diagram has been updated with a second page describing the block diagram of the Tx module and the frequencies used. This Tx module is an IC and has been assembled on a PC Board. See details of the filing. For all uploaded models (3 in total) the same RF Tx IC has been used and configured the same way. The PC Boards may appear similar, but are different in smaller details, like interfaces.  
(see 07\_W6O-102030A\_Blockdiagram.pdf)

**Question 3:**

*Please update the labeling exhibit to also show position of the label on the device. Additionally please note that for labels placed under batteries, as an option to placing the FCC label on the exterior of the device, the FCC label may be placed in a user accessible area if the following conditions are met:*

- *The device is handheld (notebook computers are considered as handheld);*
- *The FCC identifier is visible at the time of purchase. Marketing the device without the battery installed when the label is in the battery compartment is acceptable. The FCC ID on the box, or additional documentation directing the user where to find the FCC label, also satisfies this requirement;*
- *The user accessible area must not require any special tools for access, and the FCC label must not be placed on a removable part;*
- *The FCC ID, Model Number, or FCC logo must be on the label and must meet all general labelling requirements or policies that apply for Certification, Verification or DoC.*

*Please comment on the section in yellow if the battery is not on the external portion of the device.*

**Answer 3:**

The FCC identifier is visible at the time of purchase. The device will be marketed without the battery installed and the label will be in the battery compartment. Information to the user has been incorporated in the user manual. The user is informed about the location of the Label and FCC ID (See: 15\_W6O-102020A\_User-manual.pdf)

**Question 4:**

*Antenna information mentions Reverse SMA connection for the antenna. However schematics themselves state SMA. Please clarify as a standard SMA connector will not be considered compliant to the FCC's unique antenna requirement.*

**Answer 4:**

The antenna as described in the document 05\_W6O-102030A\_Antenna-info.pdf is the correct antenna used. Other documents have been corrected (user manual and schematics) with proper antenna reference and gain. The schematic has been changed and indicates REV-SMA meaning reversed SMA connector.

(See: 08\_W6O-102030A\_Circuit-diagram.pdf, and 15\_W6O-102030A\_User-manual.pdf)

**Question 5:**

*Section 36.7 of the manual mentions a 3 dBi gain antenna. However other documentation provide suggests the gain is different. Please review.*

**Answer 5:**

See answer on question 3

**Question 6:**

*Section 3.2 of the test report appears to show compliance to radiated band edge requirements – but the test is cited as an RF conducted test. Kindly review as compliance needs to be shown in field strength terms and performed as a radiated measurement (or radiated – delta band edge method). Simply RF conducted with antenna gain corrected is not sufficient..*

**Answer 6:**

Measurements have been performed and corrected Test report has been added.

(see 13\_W6O-102030A\_FCC15-test-rapport.pdf)

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**Remark 7:**

*FYI....Your RF exposure information appears to suggest 20 cm. Given the output power, it would seem that something similar to the attached may be more appropriate as it will not limit you to the 20 cm given the current FCC requirements and output power. Please review, comment or adjust as desired. Note if you desire to remove the 20 cm requirement – page 168 of the manual may need to be adjusted to remove spacing requirement.*

**Answer 7:**

Knowing that the power does not require the limitation of 20 cm, the manufacturer just wants to keep this in the manual. According to the manufacturer it will not be incorrect to warn even if there will be compliance at shorter distances to the device. The equipment will not be used at shorter distances ever during normal operations. So it will not limit the manufacturer nor the user.

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**Remark 8:**

*FYI....Once the grantee code issue is resolved, we need to ensure that the authorization letter has been signed by the POC for this grantee as given on the FCC. Currently we can not determine this given items 1) above but will re-address when issue 1 is resolved.*

**Answer 8:**

This should be correct now.  
(see 04\_W6O-102030A\_Form731.pdf)

**Question 9:**

*FYI...731 form and IC form for unlicensed devices should list the frequency range as the actual tunable frequencies and not just the band of operation (i.e. 2405 – 2480 MHz). Please take care for future applications.*

**Answer 9:**

We have corrected the frequency range and the lowest and highest used channel frequency have been indicated on the 731 form.  
(see 04\_W6O-102030A\_Form731.pdf)

**Question 10:**

*FYI... The 731 form cites an equipment type of DXT but 15.247 devices should either be DSS or DTS device*

**Answer 10:**

The 731 form has been changed into DSS. However, could you indicate where I can find code DTS?  
(see 04\_W6O-102030A\_Form731.pdf)

Best regards,  
TÜV Rheinland EPS B.V.



P. de Beer  
Approvals & Quality Manager