Declaration on radiation safety standard conformance

To whom it may concern:

N.V. Nederlandsche Apparatenfabriek "NEDAP"
Parallelweg 2
7141 DC Groenlo
The Netherlands

declares that the following product:

Description	: 2.4 GHz Microwave ID System
FCC ID	: CGDTRANSED
Manufacturer	: N.V. Nederlandsche Apparatenfabriek "NEDAP"
Brand	: NEDAP
Type/Model number	: TRANSIT EDGE

has an e.i.r.p. equal or less than 18.7 dBm (74.13 mW, including a maximum antenna gain of +8 dBi), which means that the worst case prediction of power density (100 % reflection) at 20 cm distance (worst case) can be calculated as follows:

$$S = \frac{EIRP}{4*\pi*R^2}$$ (power density without reflection)

$$S = \frac{2^2*EIRP}{4*\pi*R^2}$$ (power density with 100 % reflection)

$$S = \frac{2^2*EIRP}{4*\pi*R^2} = \frac{74.13mW}{\pi*(20\ cm)^2} = 0.06\ mW/cm^2$$ (limit = 1.0 mW/cm²)

This means that according to OET Bulletin (Edition 97-01), Supplement C (Edition 01-01), the equipment fulfills the requirements on power density for general population/uncontrolled exposure and therefore fulfills the requirements of 47 CFR Part 15.247(b)(4)

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18. MPE Calculations

According to 15.247 (b)(5), the system should operate in a manner that ensures that the public is not exposed to radio frequency energy levels in excess of the Commission's guidelines.

MPE Calcluation using
Nearson Model: S467AH-915S type antenna (equals to AW2):

Prediction of MPE limit at a given distance

Equation from page 18 of OET Bulletin 65, Edition 97-01

$$S = \frac{PG}{4\pi R^2}$$

where: S = power density
P = power input to the antenna
G = power gain of the antenna in the direction of interest relative to an isotropic radiator
R = distance to the center of radiation of the antenna

Maximum peak output power at antenna input terminal:	20.91	(dBm)
Maximum peak output power at antenna input terminal:	123.310	(mW)
Antenna gain(typical):	2	(dBi)
Maximum antenna gain:	1.585	(numeric)
Prediction distance:	20	(cm)
Prediction frequency:	915	(MHz)
MPE limit for uncontrolled exposure at prediction frequency:	0.6	(mW/cm^2)
Power density at prediction frequency:	0.038880	(mW/cm^2)
Maximum allowable antenna gain:	13.9	(dBi)
Margin of Compliance at 20cm =	9.1	dB