



# National Traffic Control Centre Highways Agency, England

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# NTCC – Overview



# **Highways Agency (HA)**

- Managing, maintaining and improving England's motorways and trunk roads
- Information to enable smarter travel choices

# **National Traffic Control Centre (NTCC)**

- Strategic signage and real time traffic information delivery to partners and public
- PFI contract, 2001 2011, Traffic Information Services (Serco)

#### **NTCC Information Services**

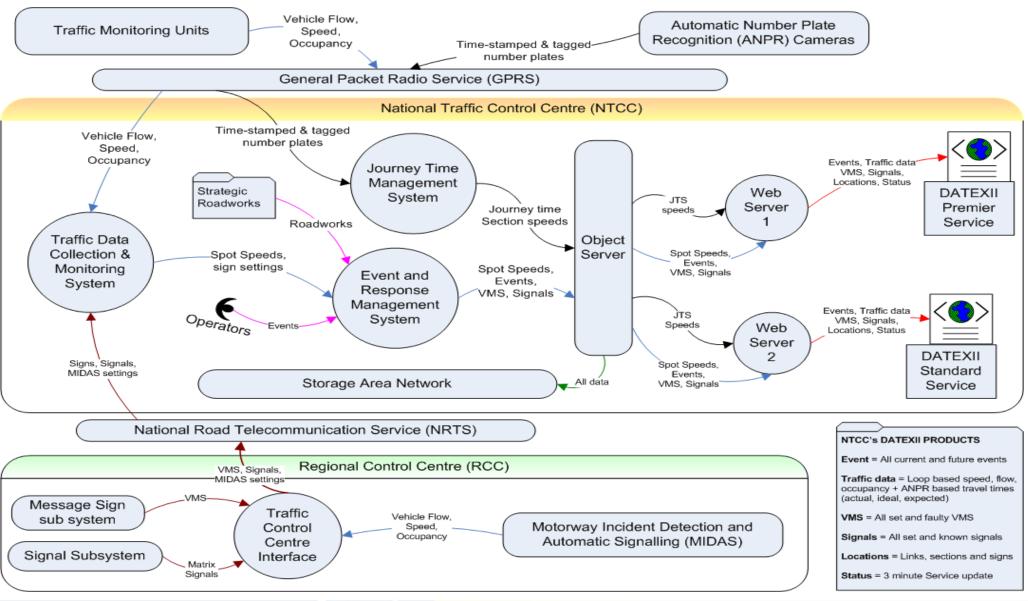
- Websites Traffic England, Atlas Pro
- TIH feeds <u>DATEXII</u>, UTMC, CORBA, TPEG, OTAP
- Others RSS, IVR, Emails, Desktop, HAIL, Traffic Information Provider

#### **NTCC DATEXII** service

- Pre release version 47 Pilot (2006)
- Version 1.0 Production (July 2007), Last update (Jan 2010)
- Version 2.0 Awaiting standard publication

# NTCC - DATEXII Publisher service system environment





# **NTCC – DATEXII Products and Services**



# 22 products

- 1M 30M
- Regional

#### **Premier Service**

2 minutes

#### **Standard Service**

10 minutes

Information Product	Premier Update	Standard Update	Estimated
illioillation Floduct	Frequency	Frequency	Payload Size
Current Roadworks	2 minutes	10 minutes	1 M bytes
Future Roadworks	6 hours	6 hours	2 M bytes
Current Planned Events	2 minutes	10 minutes	10 K bytes
Future Planned Events	6 hours	6 hours	200 K bytes
Unplanned Events	2 minutes	10 minutes	50 K bytes
Variable Message Signs	2 minutes	10 minutes	3 M bytes
Matrix Signals	2 minutes	10 minutes	9 M bytes
All Traffic Data	5 minutes	10 minutes	30 M bytes
Journey Times Traffic Data	5 minutes	10 minutes	500 K bytes
NERCC Loop-based Traffic Data	5 minutes	10 minutes	4 M bytes
NWRCC Loop-based Traffic Data	5 minutes	10 minutes	4 M bytes
SERCC Loop-based Traffic Data	5 minutes	10 minutes	4 M bytes
SWRCC Loop-based Traffic Data	5 minutes	10 minutes	4 M bytes
EMRCC Loop-based Traffic Data	5 minutes	10 minutes	4 M bytes
WMRCC Loop-based Traffic Data	5 minutes	10 minutes	4 M bytes
ERCC Loop-based Traffic Data	5 minutes	10 minutes	4 M bytes
ATM Loop-based Traffic Data	5 minutes	10 minutes	1 M bytes
Dartford PCO Loop- based Traffic Data	5 minutes	10 minutes	1 M bytes
All Predefined Locations	On occurrence within 5 minutes	On occurrence within 5 minutes	25 M bytes
Journey Time Sections Predefined Locations	On occurrence within 5 minutes	On occurrence within 5 minutes	1 M bytes
Links Predefined Locations	On occurrence within 5 minutes	On occurrence within 5 minutes	14 M bytes
Variable Message Signs and Matrix Signals Predefined Locations	On occurrence within 5 minutes	On occurrence within 5 minutes	9 M bytes

# NTCC – DATEXII Publisher input, output, service levels



# **Publisher Inputs**

- Traffic data every 5 minutes
- Processing time upto 13 minutes

#### **Service Status**

- Service update
- Payload update

# TIH feed registered users

- DATEXII 45
- UTMC 7
- CORBA 10
- OTAP 2

# **Premier service (3 users)**

- Every 2 minutes
  - Google
  - Journey times through roadworks (Mouchel)
  - Southwest RCC

# **Standard service (42 users)**

- Every 10 minutes
  - 20 local authorities
  - Traffic Scotland
  - Media
  - 20+ research and traffic information providers



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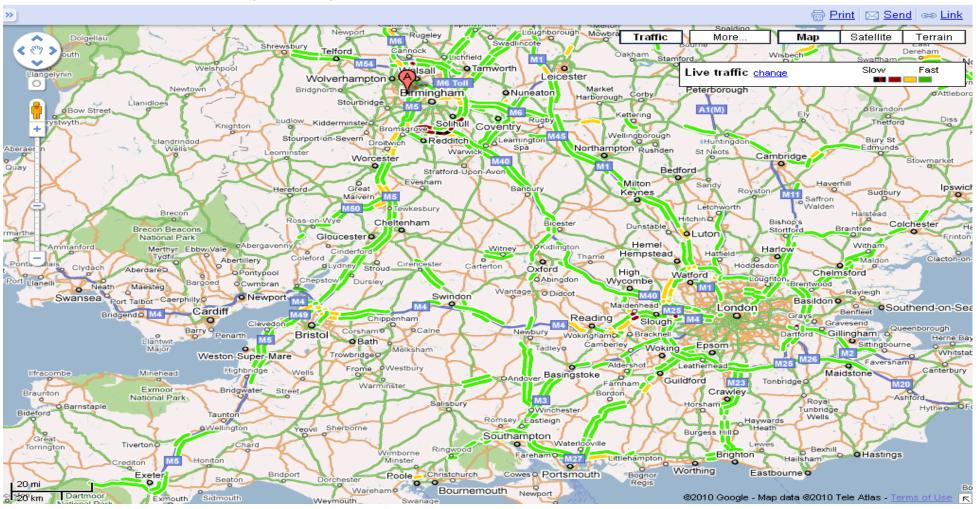
# NTCC - DATEXII for Google Maps



Web Images Videos Maps News Shopping Mail more ▼

Google maps NTCC DATEXII service Search Maps Show search options

Find businesses, addresses and places of interest.



# NTCC – DATEXII change / relationship management



### Change and relationship management

- With the customer (HA)
  - Joint Improvement Process (JIP)
  - Reactive to contract and Agency requirements
- With the users
  - Email survey questionnaire
  - Updates notified by email after the change
  - 24/7/365 ICT contact by email and telephone
  - Limited support to users for their receiver development
- DATEXII development group
  - No direct contributions to development
  - DATEX specification queries to Dr. Tim Wright

# NTCC – DATEXII current issues



# Incorrect usage of the feed

Server Connections and Frequency of Downloads

# **Incorrect Monitoring of service outage**

Metadata / If-Modified-Since / Polling every 10 minutes

#### Size of downloads

Load analysis – requires hardware upgrades

#### Awareness of the service

Minimal amongst non ITS / NTCC traffic community

# **Development of receiver**

Time and cost, software sharing

#### Updates take up

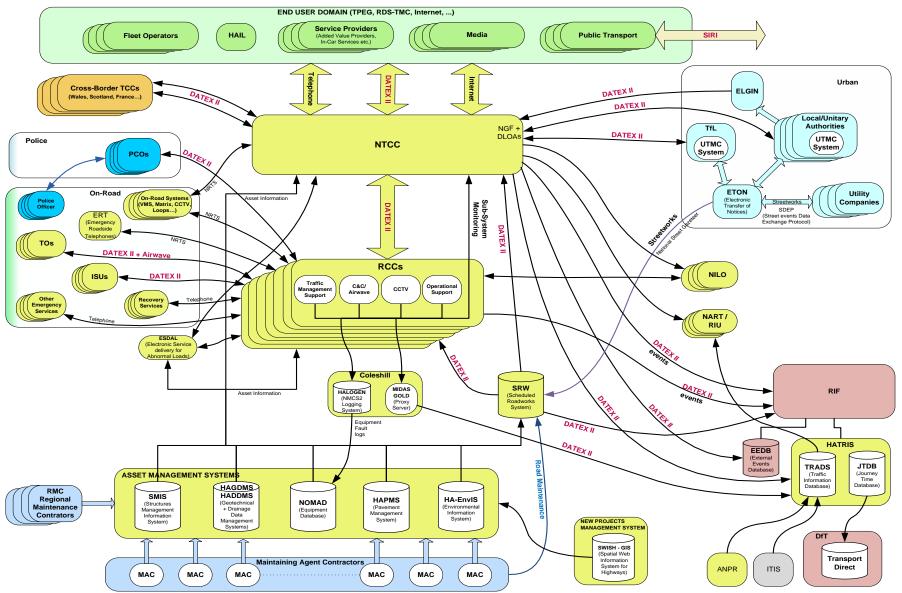
January update, good trial but no current users

# **Pictograms**

Numbers and Consistency with HA standards

# **Future – NTCC and HA Operational Interfaces**





# NTCC – DATEXII service



# Thank you

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