

## **From Spending to Earning:**

How to enhance the passenger's travel  
experience and generate income

# THE INOVA MULTIMEDIA GROUP

INOVA Technology Group  
Davos, (Switzerland)








INOVA Multimedia  
LLC, Tulsa



INOVA Multimedia  
GmbH, Hildesheim

INOVA Multimedia  
(Switzerland), GmbH

# COMPANY OVERVIEW

-  For over ten years, INOVA Multimedia has been offering turnkey solutions for integrated information, entertainment and CCTV to public transit operators, vehicle manufacturers and content providers
-  With experience in real time passenger information and infotainment systems for over 15 years, INOVA is established as a worldwide well known supplier and inventor of the route indicator in banana form
-  As of today, we have delivered more than 8.500 systems with over 32.000 displays in cosmopolitan cities such as New York City, Berlin, Geneva or Hamburg
-  INOVA's customers are in Europe, Asia, North and Latin America; among them are Bombardier, J.C. Decaux, Siemens and Alstom
-  Since 2008, INOVA has been offering a fully Ethernet based solution which simplifies the installation and maintenance of the infotainment systems

# End-2-End Solutions for Passenger Infotainment Systems



## Systems integration

### Back Office / SW solutions

Infotainment  
Passenger  
information  
Web Apps  
Video surveillance  
(CCTV)  
People counting  
ITCS / AV interfaces

### Transmission

Wifi  
3G  
DAB/DMB  
DVB-T  
Lte

### Devices



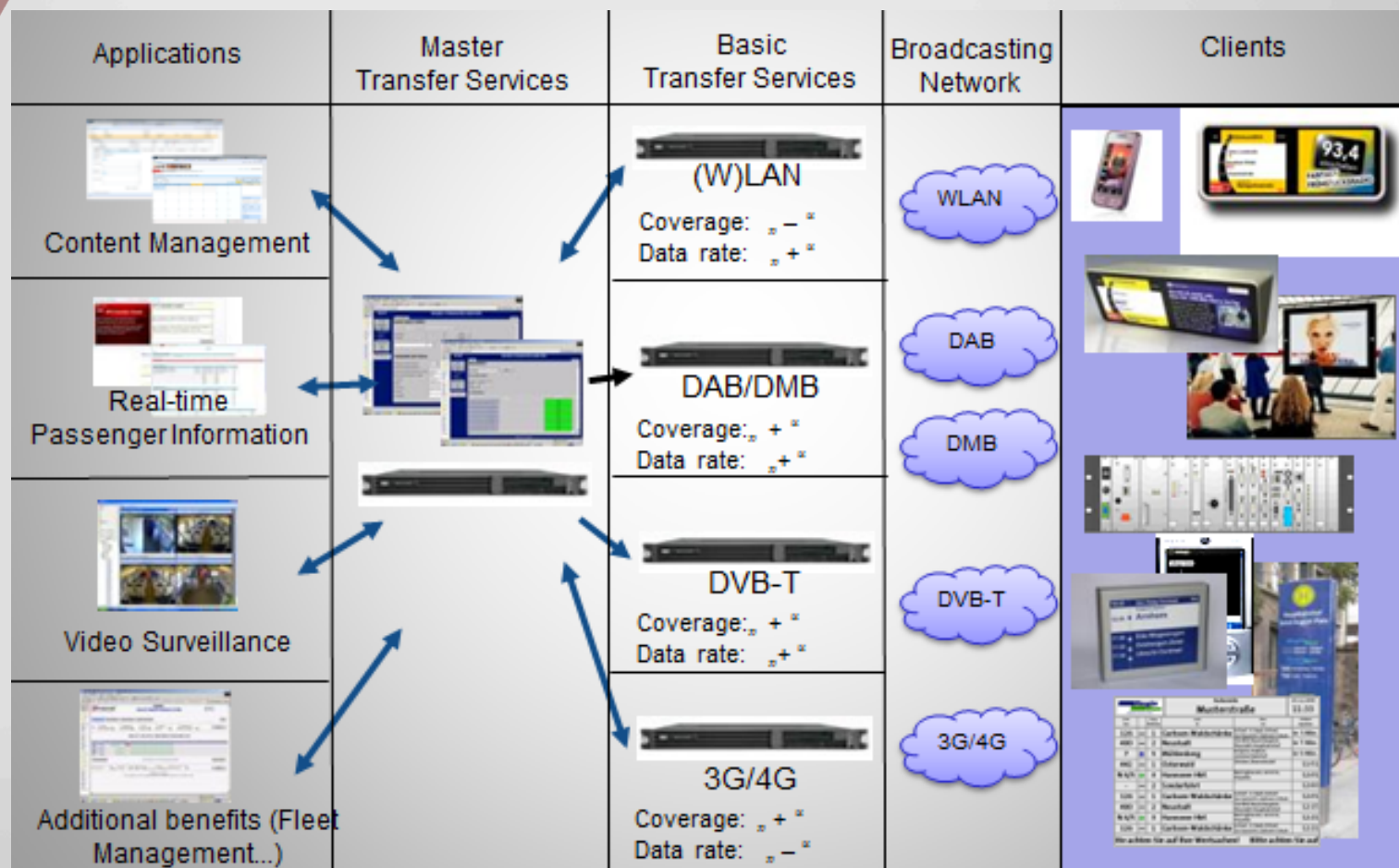
### Maintenance / Operation

Hosted IT solutions  
Fixed cost of operation  
Playout reports/  
return channels  
24/7 on-site  
installation service  
LCC-Warranty  
Availability

## Hardware and software development



# PRODUCT PORTFOLIO

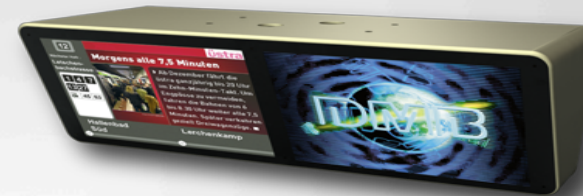


# PRODUCT PORTFOLIO

## Hardware



**MUBIS® Media Display  
(MMD) (15" / 19")**



**15" MUBIS®  
Media Quad Display (MMD)**



**Video  
Surveillance (CCTV)**



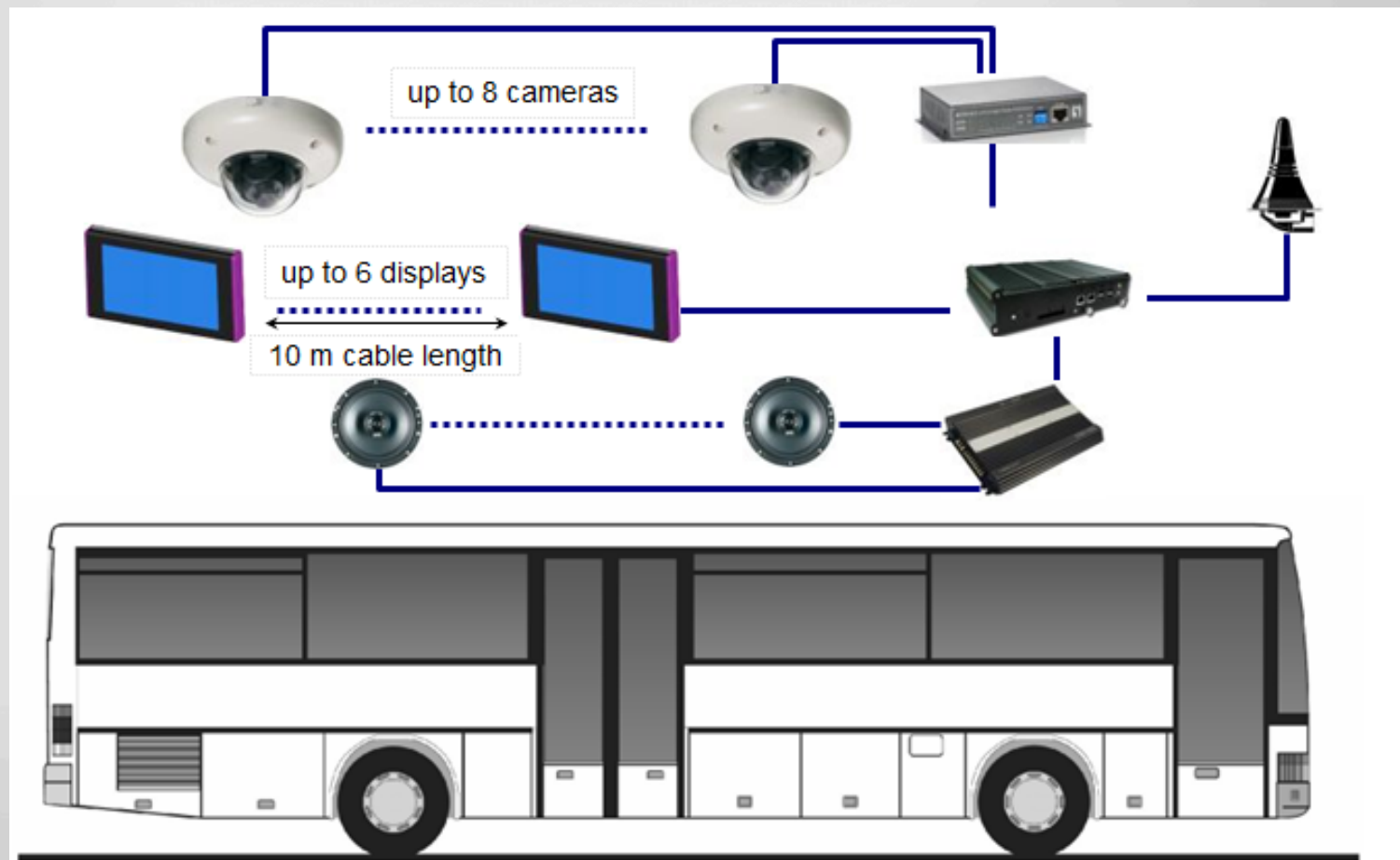
**Automated Passenger  
Counting (APC)**



**MUBIS® Media Double Display  
(MMD) (12"/15")**

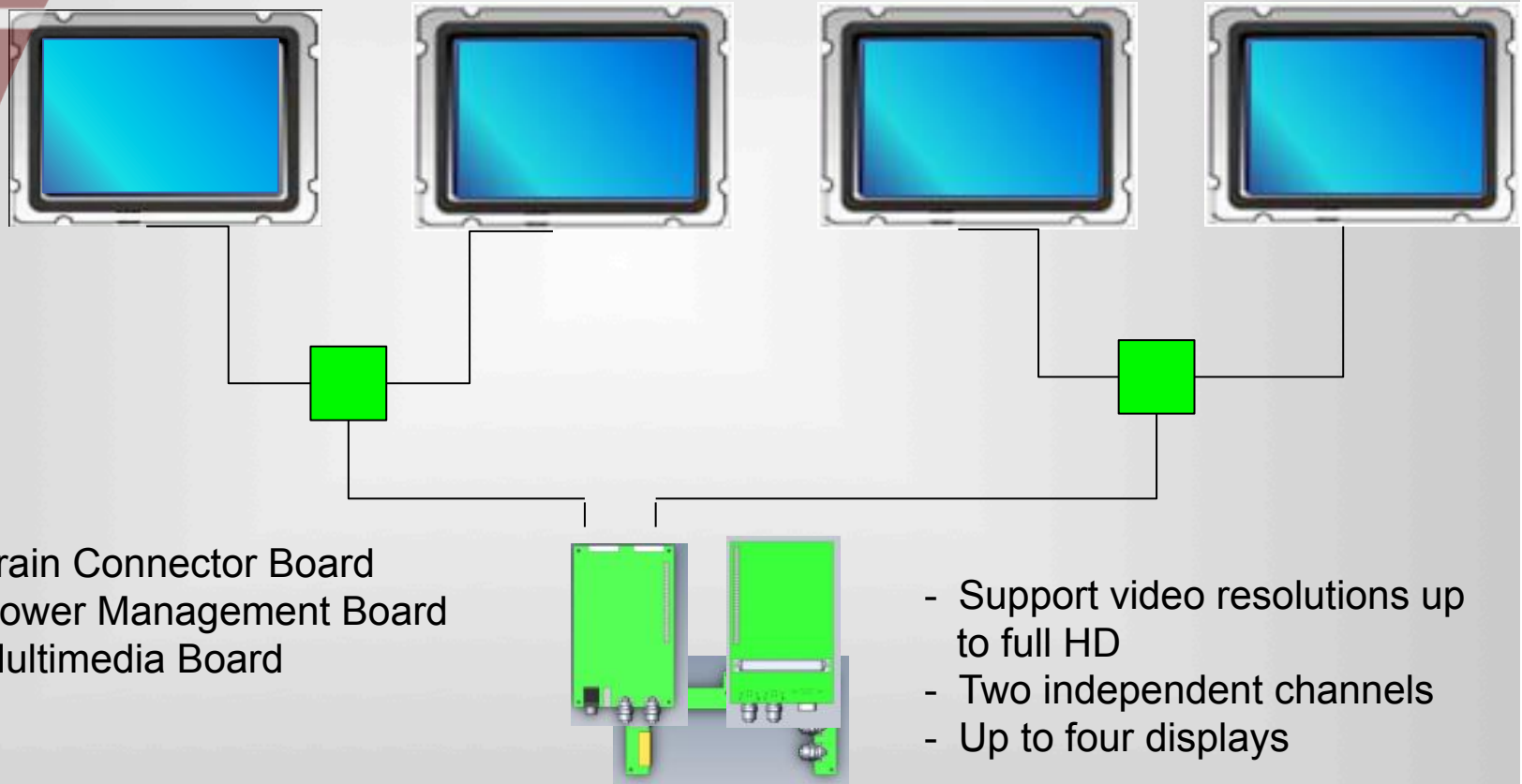
# INSTALLATION EXAMPLE

## BUS-Systems 19-inch DVI-Display, CCTV and Audio



# INSTALLATION EXAMPLE

## Slave and Master Displays in Trains





# PRODUCT PORTFOLIO

## MuBIS Master Transfer Server

**MUBIS-TRANSFER-SERVER**

20:09

**SERVERINFO**

Select Server: Testmagic v Christian Update

**Serverinformation**

Servername: Testmagic v Christian  
IP-Address: 10.11.140.3  
Online: ☐  
Packetable: ☒

**Transferstatus**

Objekt	Progress	Files
fbpool\share\Objects\Image\0016SV02L_8MP	100%	14
fbpool\share\Objects\Image\02895BL10.jpg	100%	1
fbpool\share\Objects\Image\2714w08L.jpg	100%	1
fbpool\share\Objects\Image\02895BL09.jpg	100%	1
fbpool\share\Objects\Image\02895BL08.jpg	100%	1
fbpool\share\Objects\Image\02895BL07.jpg	100%	1
fbpool\share\Objects\Image\02895BL06.jpg	100%	1
fbpool\share\Objects\Image\02895BL05.jpg	100%	1
fbpool\share\Objects\Image\02895BL04.jpg	100%	1
fbpool\share\Objects\Image\02895BL03.jpg	100%	1
fbpool\share\Objects\Image\2714w08L.jpg	100%	1
fbpool\share\Objects\Image\2714w01L.jpg	100%	1

©2003 Inova Computers User: admin

**MUBIS-TRANSFER-SERVER**

Logout

Allow Symbolic Links

☐ Delete

☐ Delete

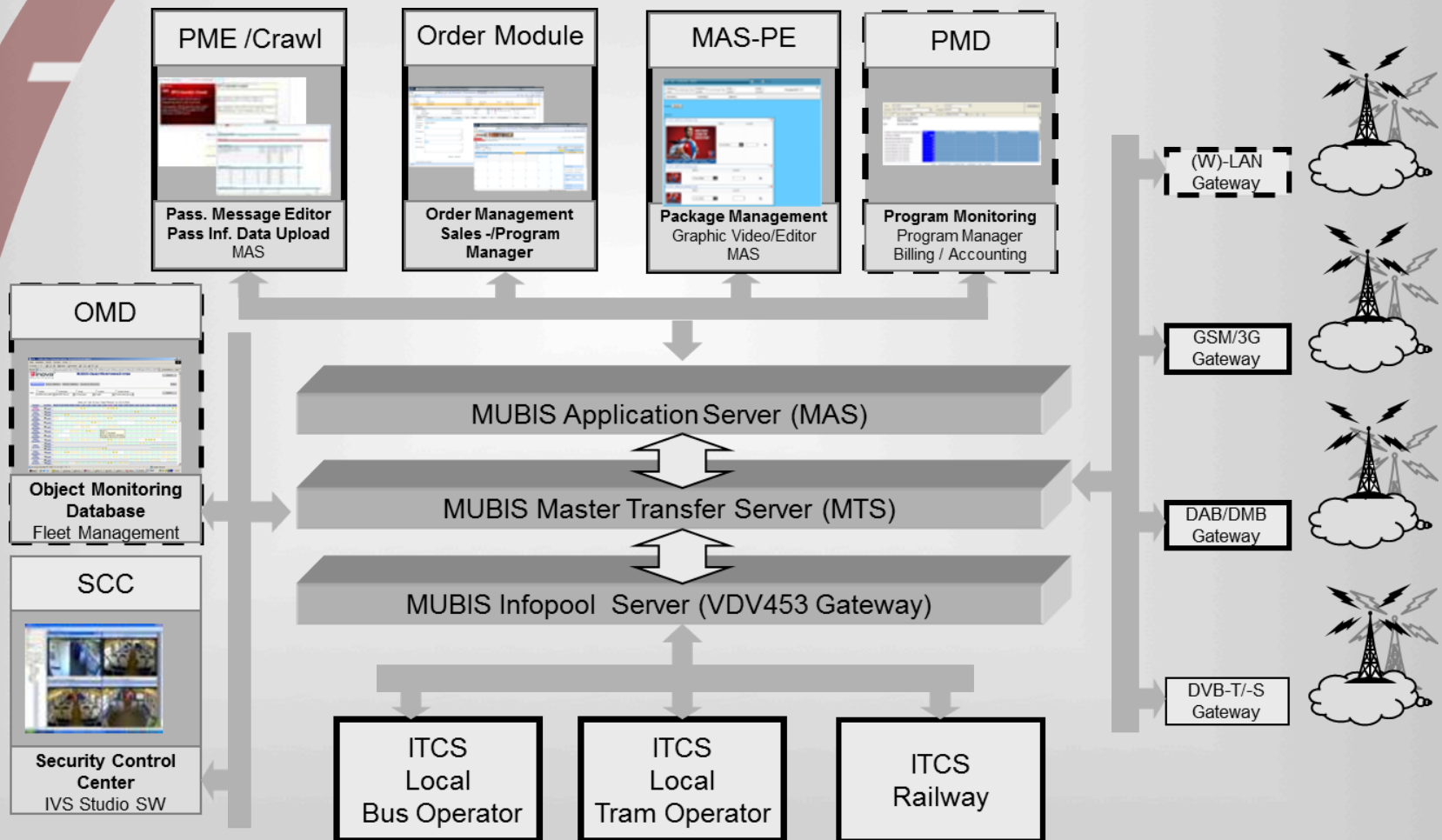
☐ Add

ol/share

KeepList: dontdestroy.lst  
Recoveryfile: erecover.log  
Karenczeit: 0  
QueueLength: 5

©2003 Inova Computers User: admin

# MuBIS Application Server (MAS) Back Office Applications



# MuBIS Studio Framework (MFS)

## Back Office Applications

- The MuBIS Studio Framework (MSF) is a powerful application to create, provide and manage content for various types of mobile and stationary information and advertisement displays.
- **It covers all aspects of a content creation workflow as**
  - Content creation
  - Content import
  - Managing of available “on-air time”
  - Managing of buylines and campaigns
  - Program schedule management
  - Program publishing
  - Monitoring of on-air time and show cases

# MuBIS Studio Framework (MFS)

## Back Office Applications

- The MuBIS Studio Framework allows to manage multiple channels (e.g. different vehicle groups, station screen groups and locations) providing general and channel specific content, and supports various different display types.
- Additional channels can easily be installed at a later stage for example when new bus/metro lines, stations or even new cities will be added to the system.
- The complete system can be monitored and updated from our factory site without having to have physical access to the system.
- **Most important: The standard software can easily be adapted to support the existing workflow of a customer.**



# MuBIS Studio Framework (MSF)

## Workflows and Roles



**Actors/Roles**

**Workflow**

**Train Operation  
Control Manager**

**Operation  
Message Management**

- Create text messages in case of disruptions, incidents etc,
- Schedule in date and time, release times, vehicle position and identifier
- Support ticker/crawl and multimedia formats based on templates
- Select predefined messages
- Freetext messages
- allocate fullscreen mode in case of emergency alerts

**Activities**

**Graphic/Video  
Editors**

**Package and Media  
Management/  
Content Creation**

- Pre-produce packages/ spots
- Manage pre-produced media
- Produce packages/ spots on request by a respective order
- Assign packages to orders
- Approve/release packages
- Upload media
- Manage feeds from 3rd party CMS, RSS feeds
- Set parameters like duration, spot-types etc
- Preview on desktop

**Sales  
Program Manager**

**Order  
Management**

- Create order
- Create and motives (campaigns)
- Assign and approve buylines
- Assign categories to motives
- Set address parameters
- Preview packages on desktop
- View capacity utilization

**Program Manager**

**Program Schedule  
Management**

- Create program template
- Review program schedules
- Approve program schedules
- Define categories
- Assign categories to program templates
- Schedule program schedules
- Generate program previews

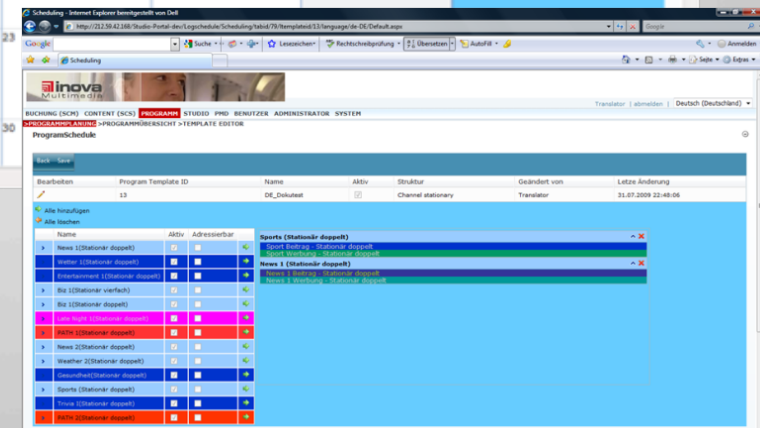
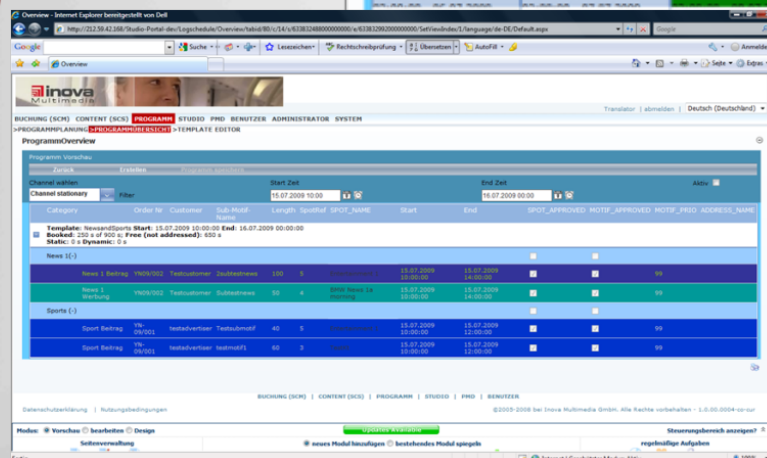
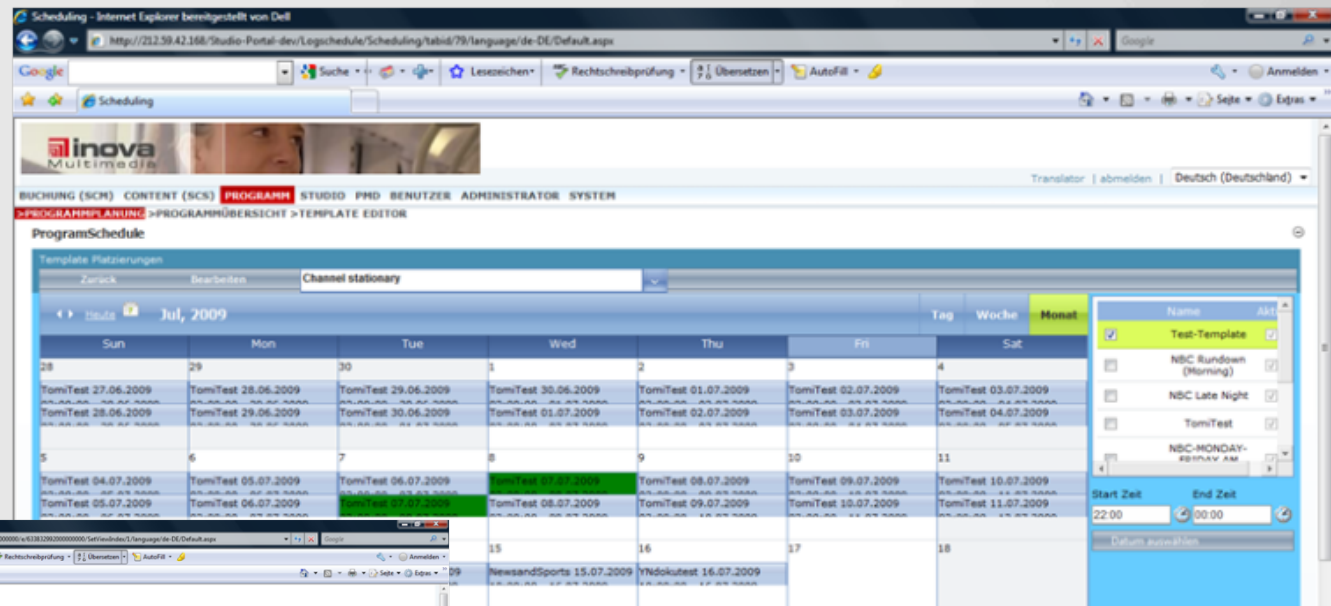
**Sales  
Program Manager**

**Program  
Monitoring**

- Review/monitor played out packages/spots
- Browse and search on logging datasets of monitored show cases
- Create reports by various parameter sets
- Export to PDF and MS office documents

# MuBIS Studio Framework (MSF)

## Workflows and Roles



# MFS Application Example

## Message Editor, being used in Hamburg, Germany

Templates: Sperrmeldung Symbol: Select Symbol

**mobil**

**U2 WTC elevator closed**

WTC elevator from street level to mezzanine level is out of service.

The elevator will be out of service until approximately 8 PM Tuesday 8/12 for necessary maintenance.

WTC elevator closed

WTC elevator from street level to mezzanine level is out of service.

The elevator will be out of service until approximately 8 PM Tuesday 8/12 for

Text preview

Save text

from: 12/4/2009 until: 12/4/2009 ☐ Authorize

December 2009

S	M	T	W	T	F	S
49	29	30	1	2	3	4
50	6	7	8	9	10	11
51	13	14	15	16	17	18
52	20	21	22	23	24	25
1	27	28	29	30	31	1
2	3	4	5	6	7	8

Message sec.: 15

Select video 0

Message 0

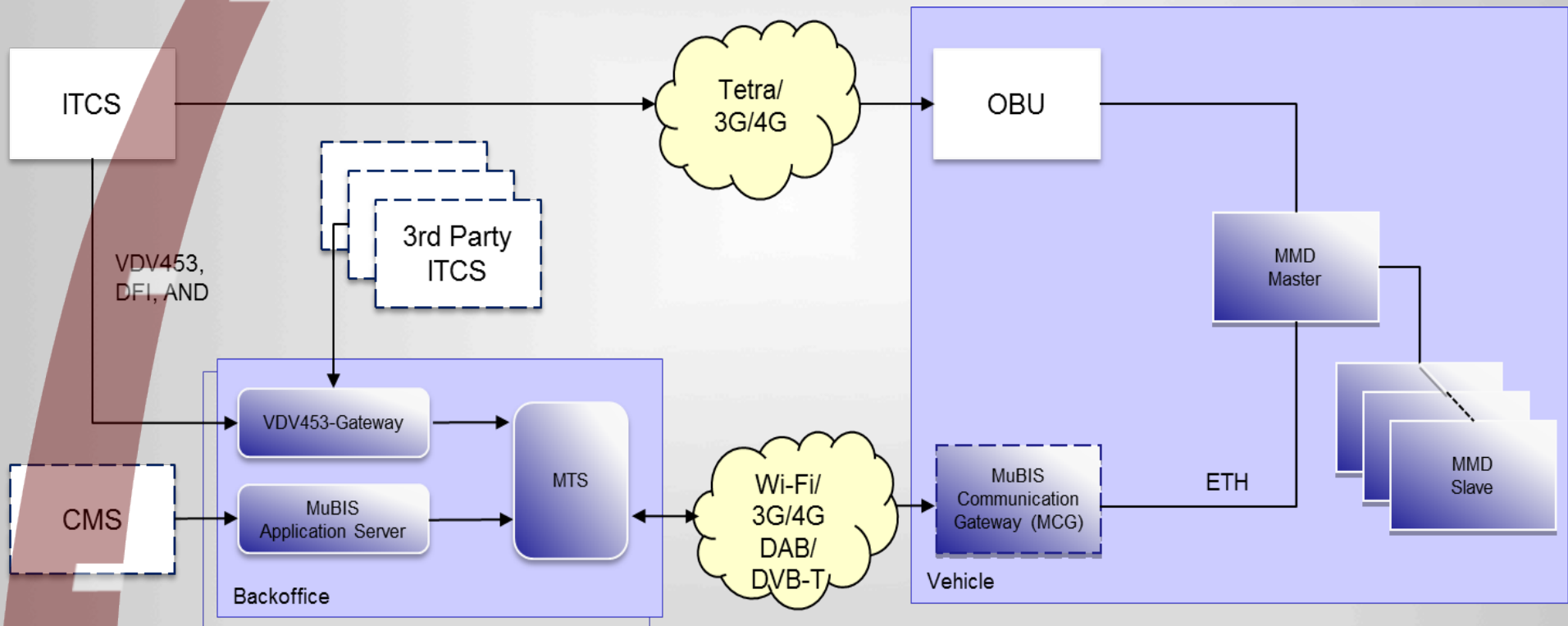
Select image 0

2 3 4 5 6 7 8 9

Select image 0

# PRODUCT PORTFOLIO

## Real-time passenger information

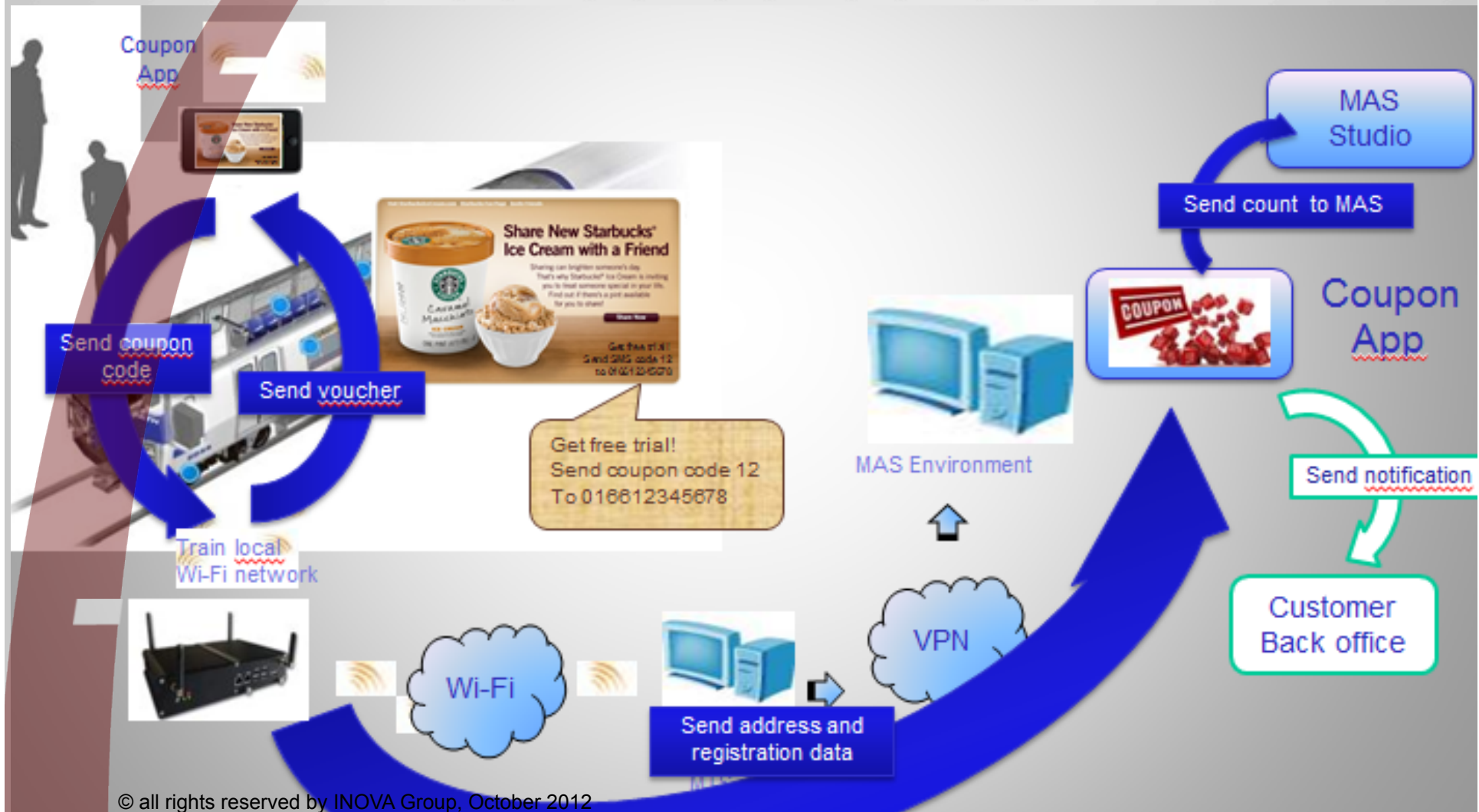




# SmartTrain: MuBIS Wi-Fi Access Server including Apps



# SmartTrain: „Coupon Application for Advertisers“



# PRODUCT PORTFOLIO

## Passenger information for disabled persons

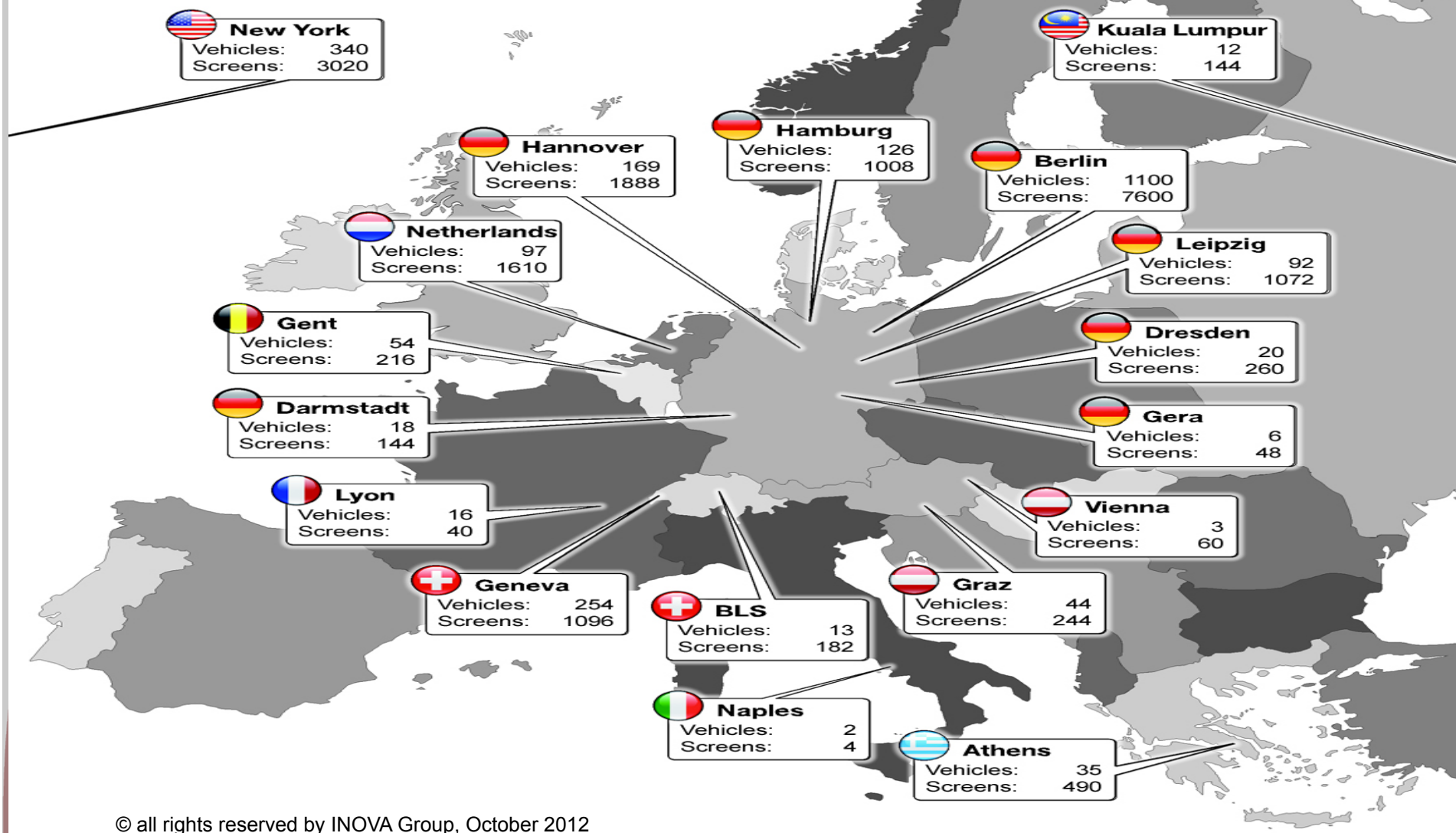
### Wi-Fi- Hotspot on Trains





# REFERENCES

## Successful projects





## INOVA products based on Ethernet



- Ethernet synchronized video player
- 12" – 22" Single, twin and quad solutions
- Enhanced Power management and Backlight Control Functions
- Ethernet daisy chain (internal switch) or switch topography usable
- No limitation for repeating (256 MMDs addressable)
- Max. cable length CAT5 100 m
- Easy integration adaptation to an existing Ethernet backbone
- Easy extendable with more (e.g. MMDs) or other Ethernet components (e.g. CCTV)
- High acceptance at train and car manufacturer due standard technology

# Customer BVG

## Berlin, Germany

**BVG**





# Customer üstra Hannover, Germany



# Customer TPG

## Geneva, Switzerland





# Customer Nederlandse Spoorwegen Netherlands



# Customer Hamburger Hochbahn Hamburg, Germany





# Customer Stadtwerke Osnabrück Osnabrück, Germany



# Customer KLIA Transit Kuala Lumpur, Malaysia





# Customer NBC / PATH New York City / New Jersey, USA



# THANKS FOR YOUR ATTENTION!

For further information please do not hesitate to  
contact me at any time:



## **INOVA Multimedia**

Christoph H. von Uslar, President

Phone: (201)-432-6913, Cell: (212)-518-4916

E-Mail: [c.vonuslar@hmi-group.com](mailto:c.vonuslar@hmi-group.com)