



# 17<sup>th</sup> ICCRTS

## Treatment of Incidents System: a success case during the 5th CISM Military World Games

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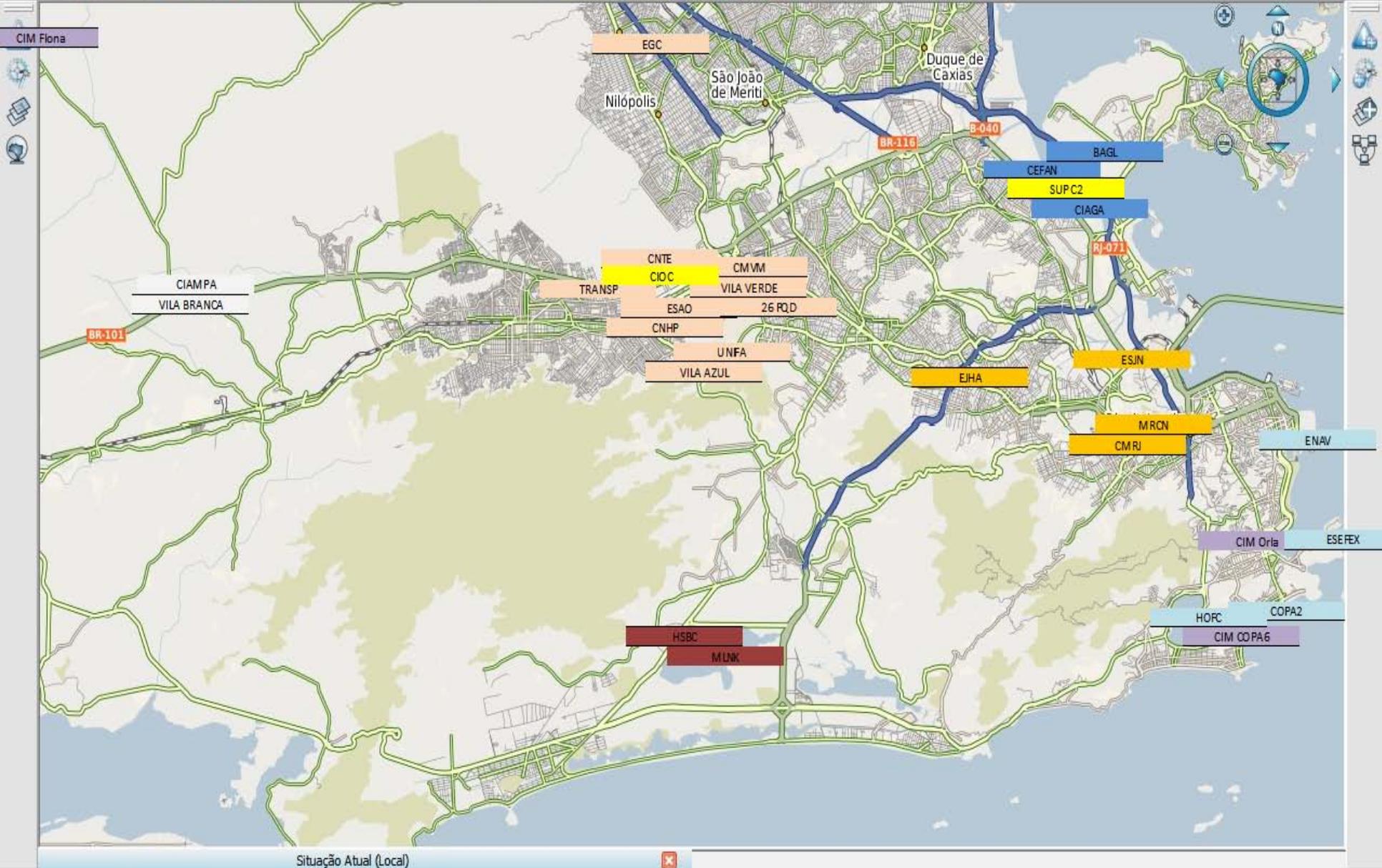
# Agenda

- 5th Military World Games (MWG) - overview
- Incident System (IncSys) – overview
- Experiences During Preparation
- Experiences During Execution
- Results
- Conclusion and Lessons Learned

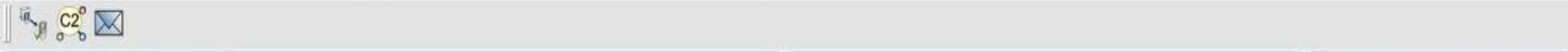


# 5th CISM Military World Games - overview





Situação Atual (Local)

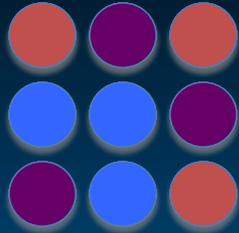


043° 20' 49.46" W 22° 46' 21.70" S

Info Op: Situação Atual (Local)



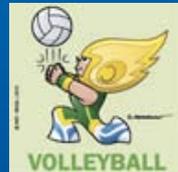
# 5th MWG - overview



Tom Jobim international airport



Athletes' villages



20 sports competitions



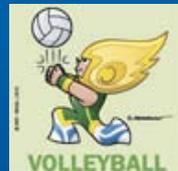
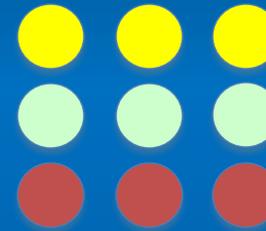
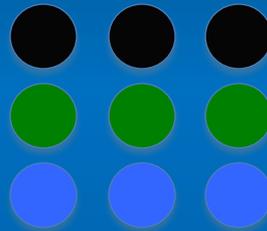
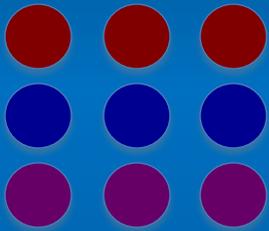
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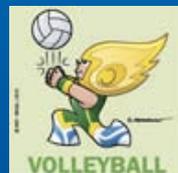
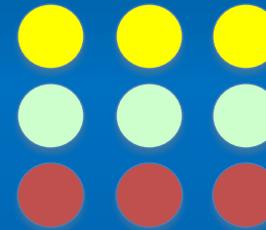
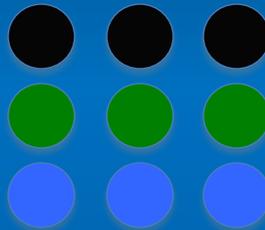
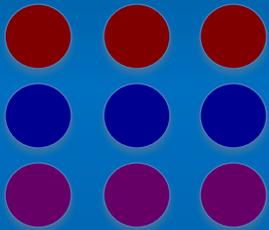
# 5th MWG - overview



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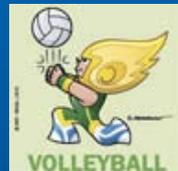
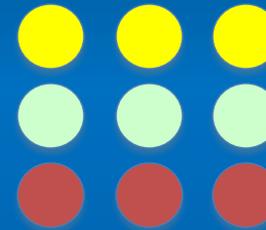
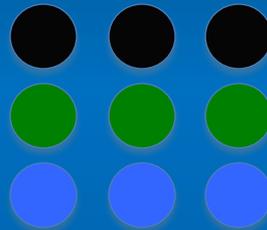
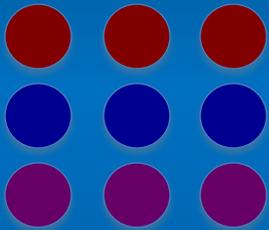
# 5th MWG - overview



Tom Jobim international airport



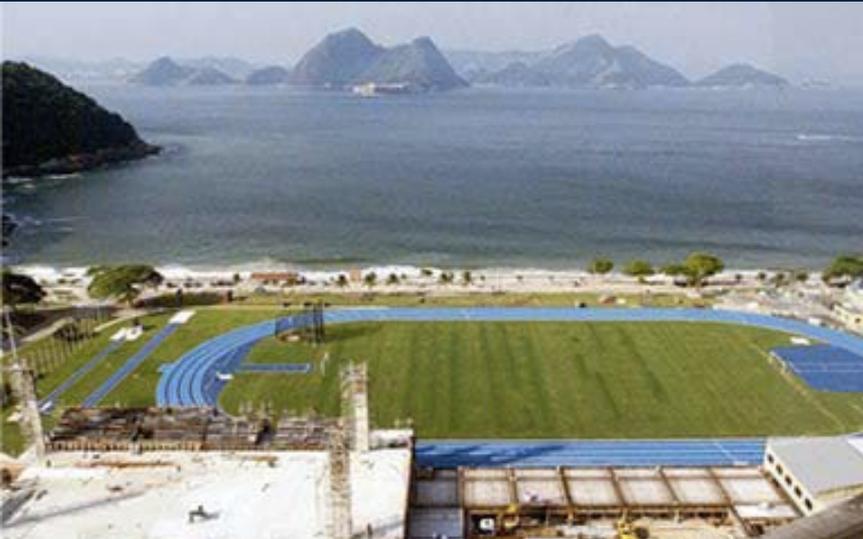
Athletes' villages



20 sports competitions



# 5th CISM Military World Games - overview





# 5th CISM Military World Games - overview





# 5th CISM Military World Games - overview

Operational  
Management  
System (OMS)

- Planning
- Scheduling of the expected activities
- Accreditation

Incident  
System  
(IncSys)

- Incidents treatment
- Convoy tracking
- Georeferenced information



# Incident System (IncSys)



Gerenciador de Incidentes

Visualizador de Incidente

5º JMM - GERENCIAMENTO

Núm	Sev	Id
397	4	VILA_BRANCA 98
398	1	CEFAN 09001
399	1	CEFAN 04005
400	5	CEFAN 07001
401	3	CEFAN 06011
402	3	CEFAN 98002
403	5	CEFAN 98003
404	5	CEFAN 98004
405	5	CEFAN 98005
406	5	CEFAN 98006
407	5	CEFAN 98007
408	1	CEFAN 09012
409	1	CEFAN 99001
410	5	CEFAN 06001
411	5	CEFAN 06003
412	3	CEFAN 06007
413	2	CIAGA 99003
414	5	CIAMPA 9800
415	5	CMRJ 06022
416	4	CMRJ 04006
417	5	CMRJ 06032
418	5	CMRJ 06036
419	1	CMRJ 04020
420	5	CMRJ 02017
421	5	CMRJ 05011
422	1	CMRJ 04026
423	5	CMRJ 98001
424	5	CMRJ 98004
425	3	CMRJ 98005
426	5	CMRJ 98006
427	5	CMRJ 98007

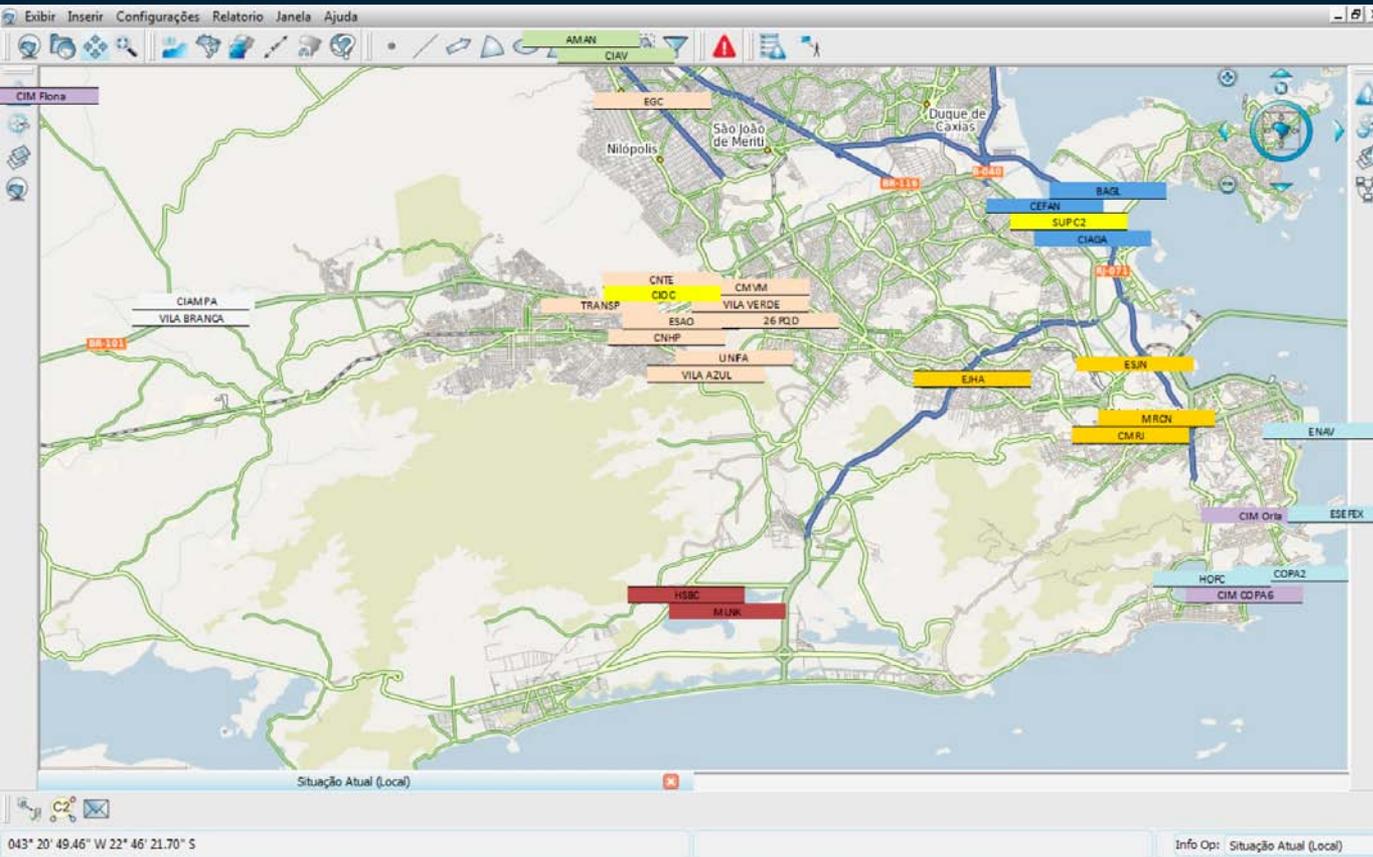
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# Incident System (IncSys)



- JOIC – Joint Operations Integrated Center
- LIC – Local Integrated Center



# Incident System (IncSys)



- Features incorporated from the Brazilian Army Command and Control System
  - Distributed database
  - Geographical information features
  - Known symbology
  - Security, ...
- New features exclusively developed for the IncSys
  - Convoy tracking by cell phones
  - Incidents treatment
  - Pictures coming from outside by cell phones
  - Exclusive access control with a private network, ...



# Experiences During Preparation



- The Assembly of the International Military Sports Council (CISM) in May 2010 and the 45th World Military Shooting Championship (WMSC) in November 2010
- The need to form a team responsible for supporting the system during the V MWG
- The training of the operators of the system
- Infrastructures of the Integrated Centers



# Experiences During Execution

- Incidents treatment:
  - Not used much in the beginning, but used much at the end
  - The real-time information that arrived, encouraged discussion among operators
  - Details of the incidents contributed to a shared awareness to better deal with the problems that occurred
  - The use of images to clarify an incident was well explored and very useful
  - Most of them were dealt with at the Local Integrated Centers



# Experiences During Execution

- Tracking of convoys :
  - It was much used and very useful
  - Coverage along the way
  - Unannounced departures
- Network concern:
  - The IncSys had a distributed database and the system could operate off-line.
  - The network problem causes were diverse and the technical staff was called in to fix the problem.



# Results



- The V MWG left us with the know-how for the preparation and execution of international competitions on international levels, such as, the FIFA World Cup and the Olympic Games
- The Incident System was used in more than 400 workstations spread out over 33 Integrated Centers and roughly 300 cell phones received the system.
- During two weeks the IncSys handled more than 1000 incidents



# Results



- The majority of the incidents occurred at the airport, athletes' villages and hotels
- Most of the incidents were related to delays in the planning and scheduling. Other incident types that occurred were health incidents, overland transport delays, flight delays and loss, loss of luggage and network problems
- The IncSys was very important for the command and control of the operations increasing agility in decision-making



# Conclusion and Lessons Learned

## 1. Planning and Preparing of the Facilities

- Some facilities were liberated too late by the agencies
- Delays in setting up the network infrastructure

### Lesson Learned

To facilitate planning and work in all its intensity, it is ideal that the facilities should be liberated exclusively for the event at a much earlier date



# Conclusion and Lessons Learned

## 2. Human Preparation

- In spite of the fact that the infrastructure and logistical support has to be ready, the preparation of the human resources is essential for the success of an event
- The system needs to become familiar to users

### Lesson Learned

The users' interaction should be natural and the software should be simple and intuitive, so the user does not make mistakes or lose valuable time



# Conclusion and Lessons Learned

## 3. Tracking on-line

- The online convoy tracking was one of the most important features of the system
- It facilitated the execution and control of the activities

### Lesson Learned

The tracking on-line feature gives flexibility and security to the organizers, because it allows to have factual knowledge of some delays, thus making decisions become more effective



# Conclusion and Lessons Learned

## 4. Distributed DataBase

- The IncSys should be able to operate even if one Integrated Center loses its data link with other centers
- The system should be able to recover the information after the link is reestablished
- To keep distributed data is difficult because it is very dependent on local networks

### Lesson Learned

**Distributed database has its advantages, but it has a high price for its maintenance at the same time.**



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