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# NCT-DG Introdution

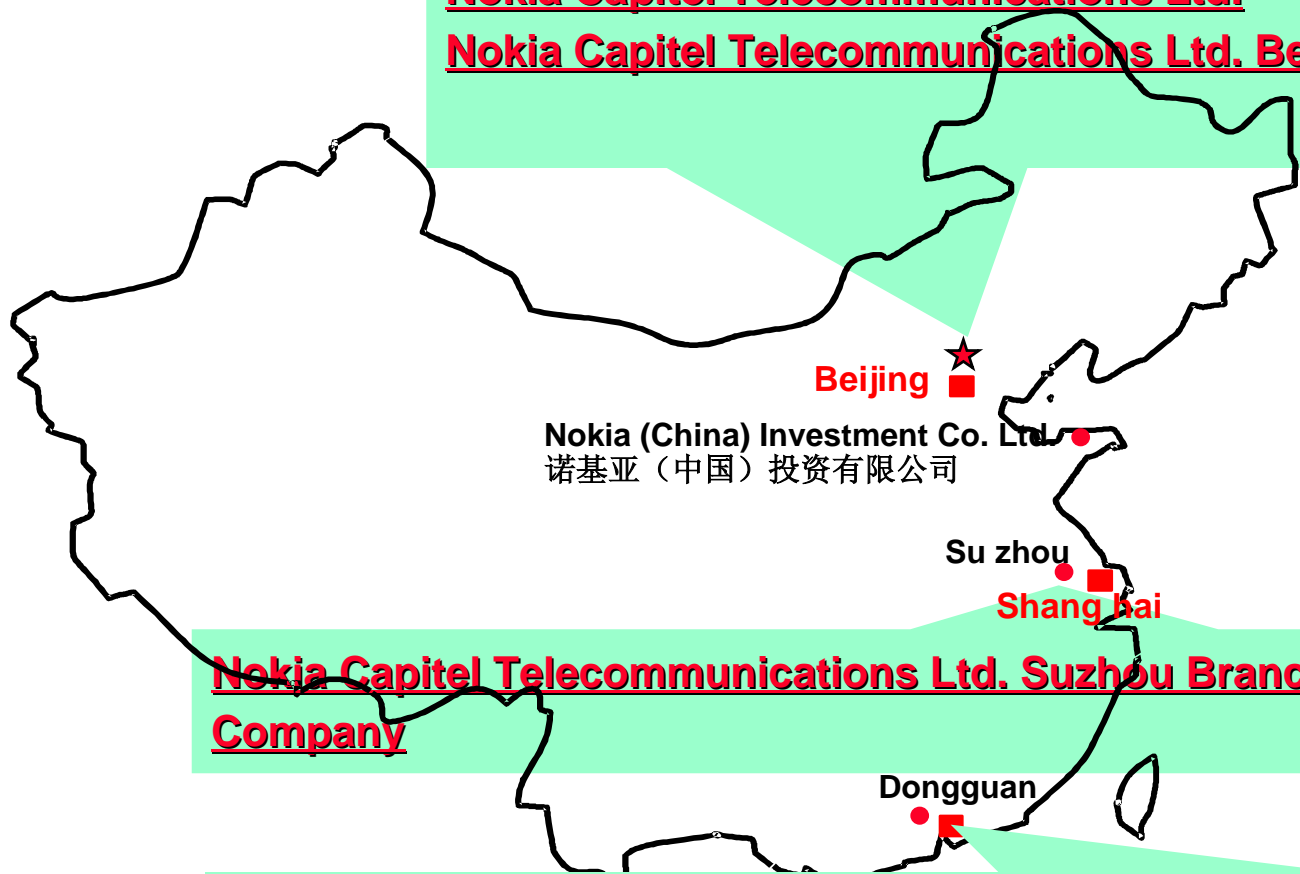
## **Agenda:**

Introduction  
Factory Tour  
Discussion

# Nokia's Joint Ventures in China

Nokia Capitel Telecommunications Ltd.

Nokia Capitel Telecommunications Ltd. Beijing Branch Company



Nokia (China) Investment Co. Ltd.  
诺基亚(中国)投资有限公司

Su zhou  
Shang hai

Dongguan

Nokia Capitel Telecommunications Ltd. Suzhou Branch Company

Nokia Capitel Telecommunications Ltd. Dongguan Branch Company

# Where is Dongguan in China ?



# Dongguan City

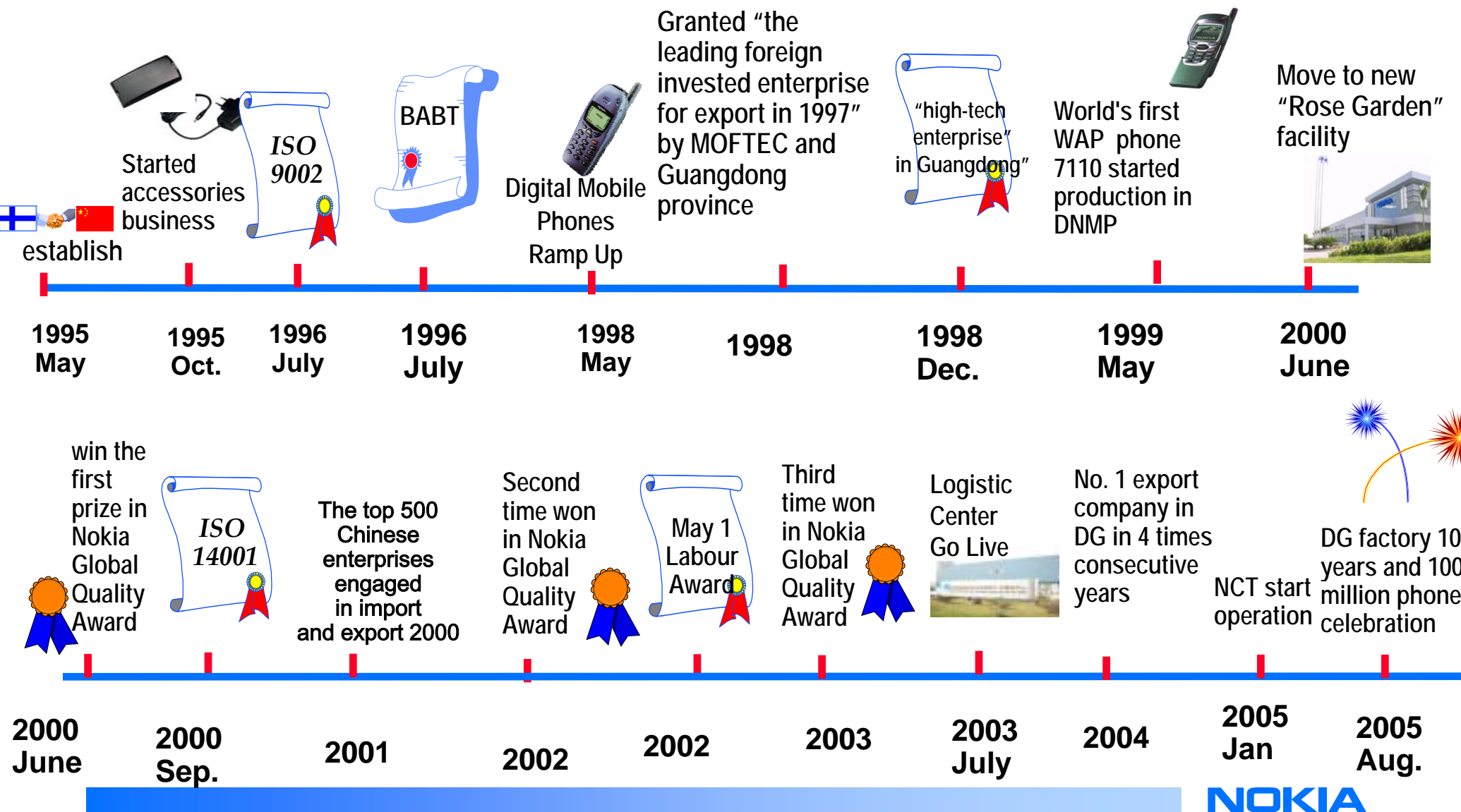
- ◀ 65 kilometers from Guangzhou Airport , 60 kilometers far away Shenzhen Airport and 90 kilometers at the north of Hong Kong
- ◀ The city covers 2,465 square kilometers area with a population of 8 millions
- ◀ Support from the local government
- ◀ More than 16,000 foreign invested enterprises
  - ↳ p.c.b., plastics, packing materials, electronics components and machinery



# **Nokia Capitel Telecommunications Ltd. Dongguan Branch Company**

- established in 1995 as a joint venture between Nokia (China) Investment Co.,Ltd and Dongguan Nanxin
- merged with Nokia China 4 manufacturing companies as one company named NCT in Jan 2005
- One of the largest FIE export enterprise in DG, won “the top 50 Guangdong industrial enterprises” in 4 consecutive years
- the accumulative handsets produced were over 100 million
- a major export company in Guangdong, with annual export exceeds one billion USD, and more than five billion USD for the last decade(1995-2005)
- Major tax payer in Dongguan, with three billion RMB tax paid for the past ten years(1995-2005)
- created more than 3000 job opportunities locally
- Managed completely by Chinese talents
- a world- class mobile phone manufacturer with cutting-edge technology, excellent quality control systems, advanced information management system and optimized logistics system

# NCT-DG History



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# Quality Improvement In NCT-DG

# 1<sup>st</sup> Resources Pool Development

## Source of Request:

IIP, internal training request  
Request from other sites & units  
Learning Market place (channel)

## Training Plan & Arrangement:

Schedule and venue arrangement  
Trainer assignment; Enrollment & invitation  
Learning Market place (channel)

## Training Material Preparation:

Select content from approved source  
Modify content; Add local examples  
Training sessions planning

## Training course fulfillment:

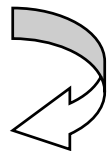
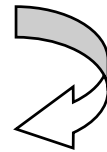
Execution of training plan; localized material  
Project proposal from candidate if required  
Trained by BB level (certified/trained) or above

## Training support & follow up:

Coach and project support; Champion  
Arranged by trainer and/or factory six sigma owner

## Certification Process:

Project completion; Competence evaluation  
Issue of certificate





# Enhancement of Resources

## **Purpose:**

To keep continuous capability development of resources pool

## **Deliverables:**

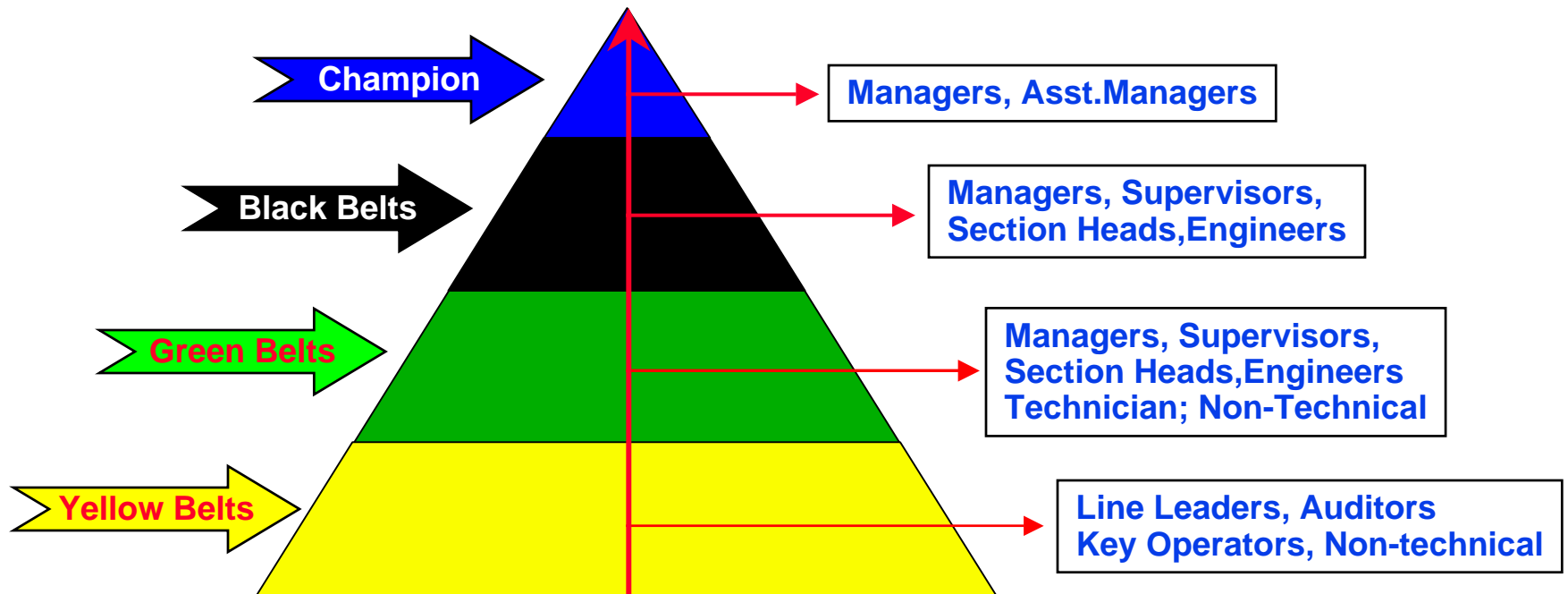
- Resources list
- Refresh Training
- Annual recertification per improvement policy.

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# Regarding Six Sigma Deployment

# Six Sigma Belts

## Hierarchy



# Training package of 6 sigma

## Local Training package

Course Title	Duration	Target Participants	Level
Yellow Belt Training Program	3 days	General staff	Basic
Green Belt Training Program	10-12 days	Improvement Team member	Middle
Black Belt Training Program	4 - 6 months	Project leader	Advance
Champion Training	1-2 days	Management Sponsor	Middle

# Six Sigma Belts Information

**Champion** -- Responsible for coordinating a business roadmap to achieve optimum Six Sigma results within their organization.

Identify the elements of a well-written business case as well as learn the importance of project selection.

Enable to influence the leaders of “support” functions necessary for project completion.

**Black Belt** -- The leader of the team responsible for applying the Six Sigma process.

Responsible in executing the Six Sigma process in selected projects and lead team in working on chronic issues that are negatively affecting the company's performance.

**Green Belt** -- An individual who supports the implementation and application of Six Sigma tools by way of participation to project teams.

Specially trained team member within his or her function specific area of the organization.

# Six Sigma Belts Information

**Yellow Belt**—An individual who received introductory training on the fundamentals of Six Sigma.

The Yellow Belt gather data, participate in problem-solving exercises and adds their personal experiences to the exploration process.

# Six Sigma Belts Training Condition

## *Black Belt Requirement*

- *Recommended by Managers*
- *Depends on Business Needs*
- *Pre-requisite : GB Certified*

## *Black Belt Certification*

- *2 Six Sigma Completed Projects.*

## *Black Belt Training Source*

- *Six Sigma SBTI Consultant Company*
- *Outside Training*

# Six Sigma Belts Training Condition

## **Precondition for GB trainees**

*Complete all basic courses and pass all examinations (knowledge + homework).*

*Communicate with line manager and put STIP/PI target for next 1 year to complete 1 project per half year.*

*Two weeks before the GB training*

*Each trainee should have a Project approved by his/her Champion or Managers. Project can be selected by trainee him/herself or allocated by ICOM*

*Project selected will be used as we go along the Six Sigma Tools and methodology.*

## **Certification Requirement:**

### **• Knowledge Base Requirement:**

*An examination will be given after the Proper Training*

*30 questionnaires (multiple choice)*

*70% Pass Rate*

*If fail, participant have another chance to take another examination.*

*If fail for the second time, HRD & participants Manager/ Supervisor will be noted.*

### **• Skill Base Requirement:**

*Completed Six Sigma Improvement Project as a project leader.*

*Nominal Target for GB Project Completion:*

*2 months (Problem Solving)*

*2- 3 months (Process Improvement)*

*(From the beginning of the training)*

*Final Report Submission to Coordinator*

*Presentation and Review by Project Team to BB's In Monthly ICOM meeting on the second Thursday afternoon of each month for GB certification.*

*Final Presentation to Champion and certificate Handover. (Conditional)*

### **• After certification requirements**

*Communicate with manager to set in STIP/PI to complete one GB project every year focus on GB's responsible area.*

*Attend Refresh training*

*1 year effective time span of certificate, yearly recertification*



# Six Sigma Belts Training Condition

## Yellow Belt Requirement

- *Recommended by Supervisors / Section Heads*
- *Target Group : Line Leaders, Auditors, Key Operators, & other non-technicals (secretary, clerks)*  
*Conditional : Operators ( depends on Supervisor's Input)*
- *Desired/Recommended : QC-7 / QCC background*

## Yellow Belt Certification

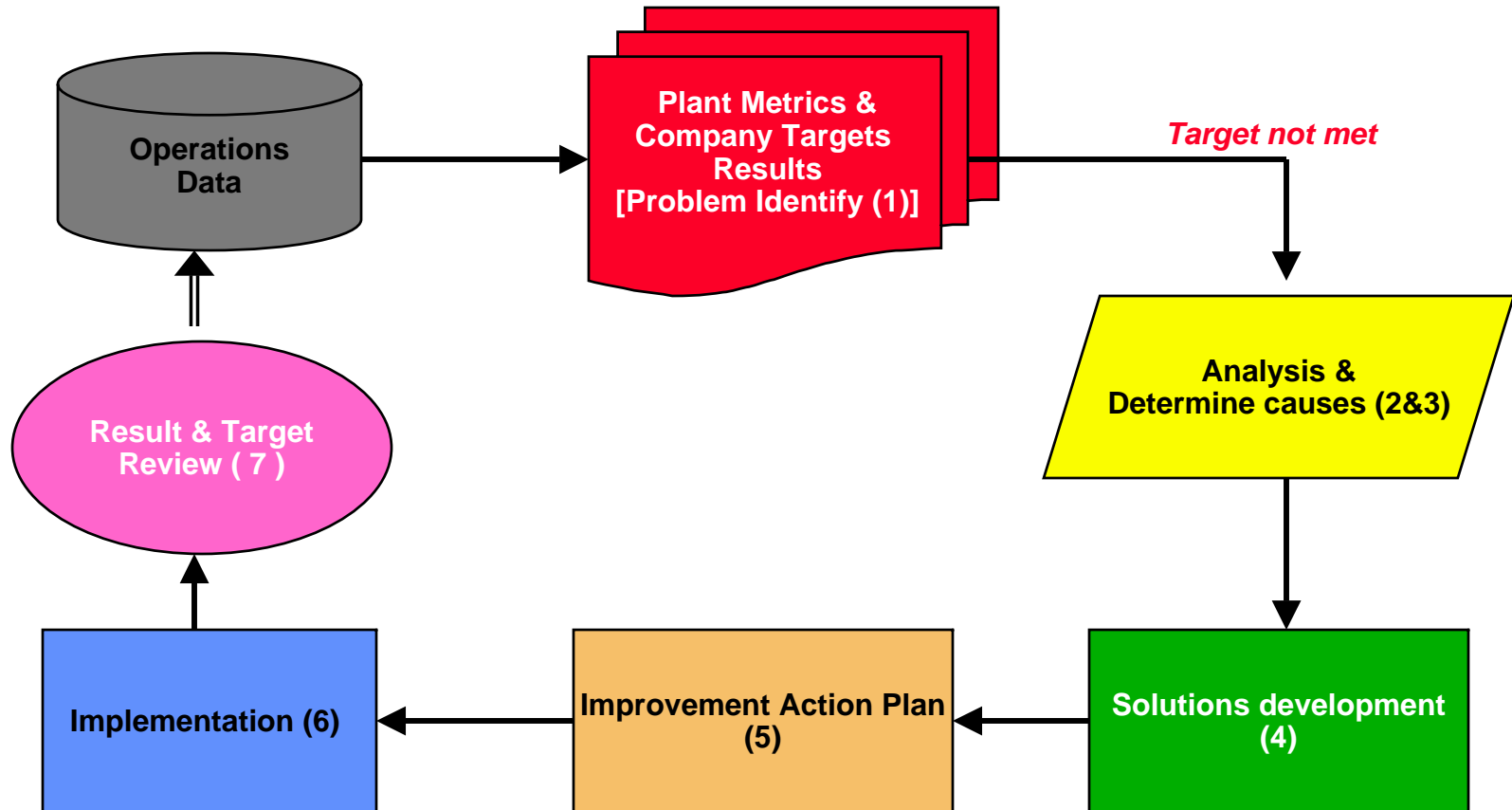
- **Req.1 – Transfer Knowledge Assessment**
  - examination after Green Belt Training
  - 30 questionnaires
  - Passing Rate of 70%
- **Req.2 - Skill Assessment**  
*Project Completion – Involvement, participation and contribution on completed project that he/she took part as a Team Member with demonstrated Six Sigma Thinking. Evaluation & Review by Black Belts*

## Yellow Belt Training Source

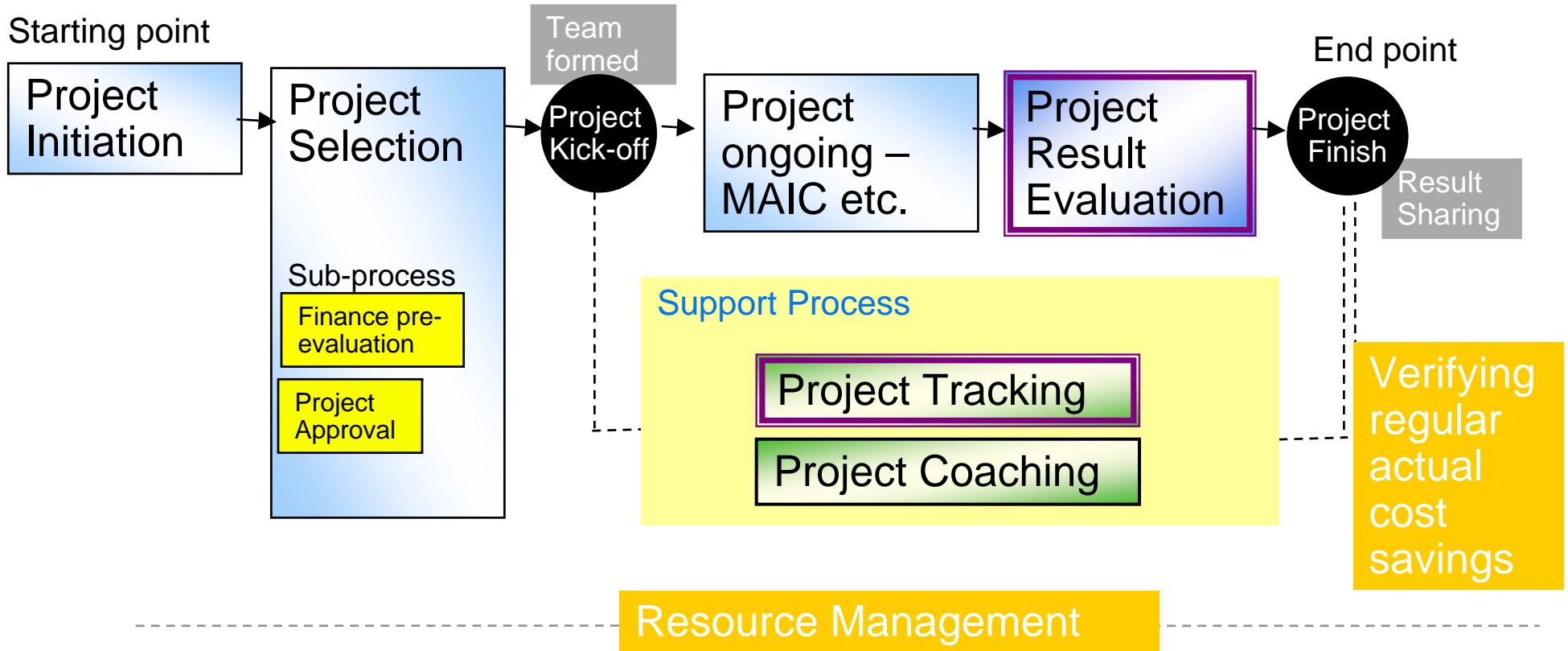
- *Internal / In-house Training by Black Belts/Active GBs*



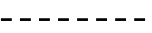
# Operation Model

Nokia 7 approach



# Process Realization



-  Standardized Process Step
-  Main process flow
-  Support process flow

# Project initiation approach

## Bottom up Committee

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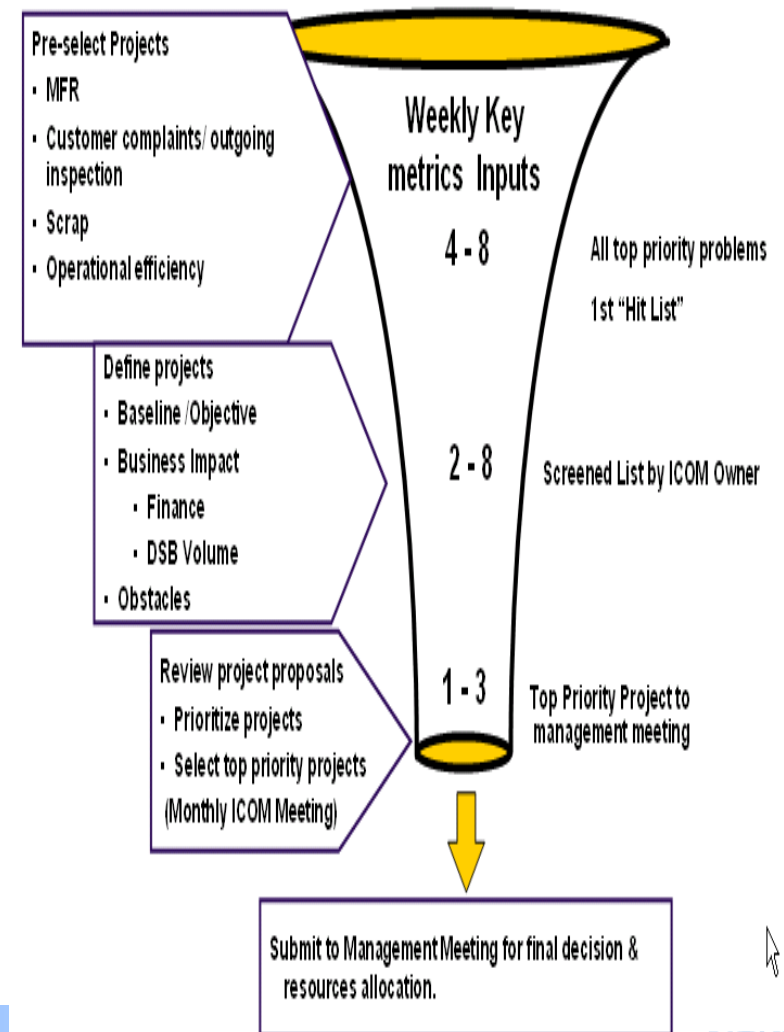
project team to propose to and get approval from departmental manager, then have registration in facilitation group

## Top down Committee

Steering group to assign project to project team

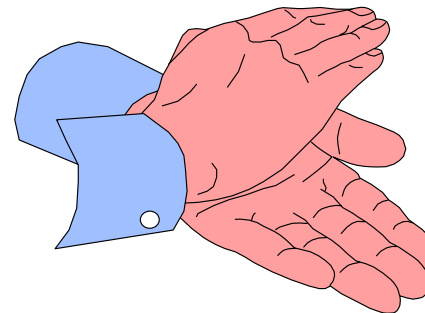
project team to register the project in facilitation group

## ICOM Running Program --The Funneling Effect



# Recognition Scheme !

- Monthly Recognition
- Half-year Quality Award
- Yearly Quality Award



# Rewarding History

[http://dgiis01nok/qaweb/QCC/QCC\(C\)/QCC%20honor/honor2005.htm](http://dgiis01nok/qaweb/QCC/QCC(C)/QCC%20honor/honor2005.htm)

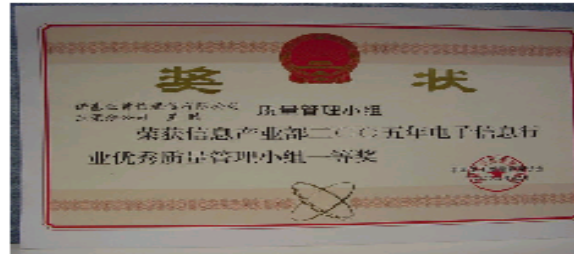
## 2005年QCC荣誉称号

### 荣誉一：

2005年6月26-7月1日，好莱坞QC小组和星晴QC小组代表公司去厦门参加了由中国电子质量协会、信息产业部与电子工业部共同举办的第25次质量管理小组交流盛会。经过紧张激烈的角逐，星晴QC小组取得了松下杯的前10名，好莱坞QC小组获得了春飞杯最佳发表奖，同时两个小组荣获信息产业部2005年电子信息行业优秀质量管理小组一等奖荣誉称号！



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### 荣誉二：

2005年4月23号，NCT-DG参加了东莞市第十次质量管理小组(QCC)竞选，有4个QCC小组获得以下荣誉，[其成果报告分享！](#)

## 东莞市优秀QCC小组

### 小组荣誉

[2005年荣誉](#)

[2004年荣誉](#)

[2003年荣誉](#)

[2001&2002年荣誉](#)

[QCC主页](#)