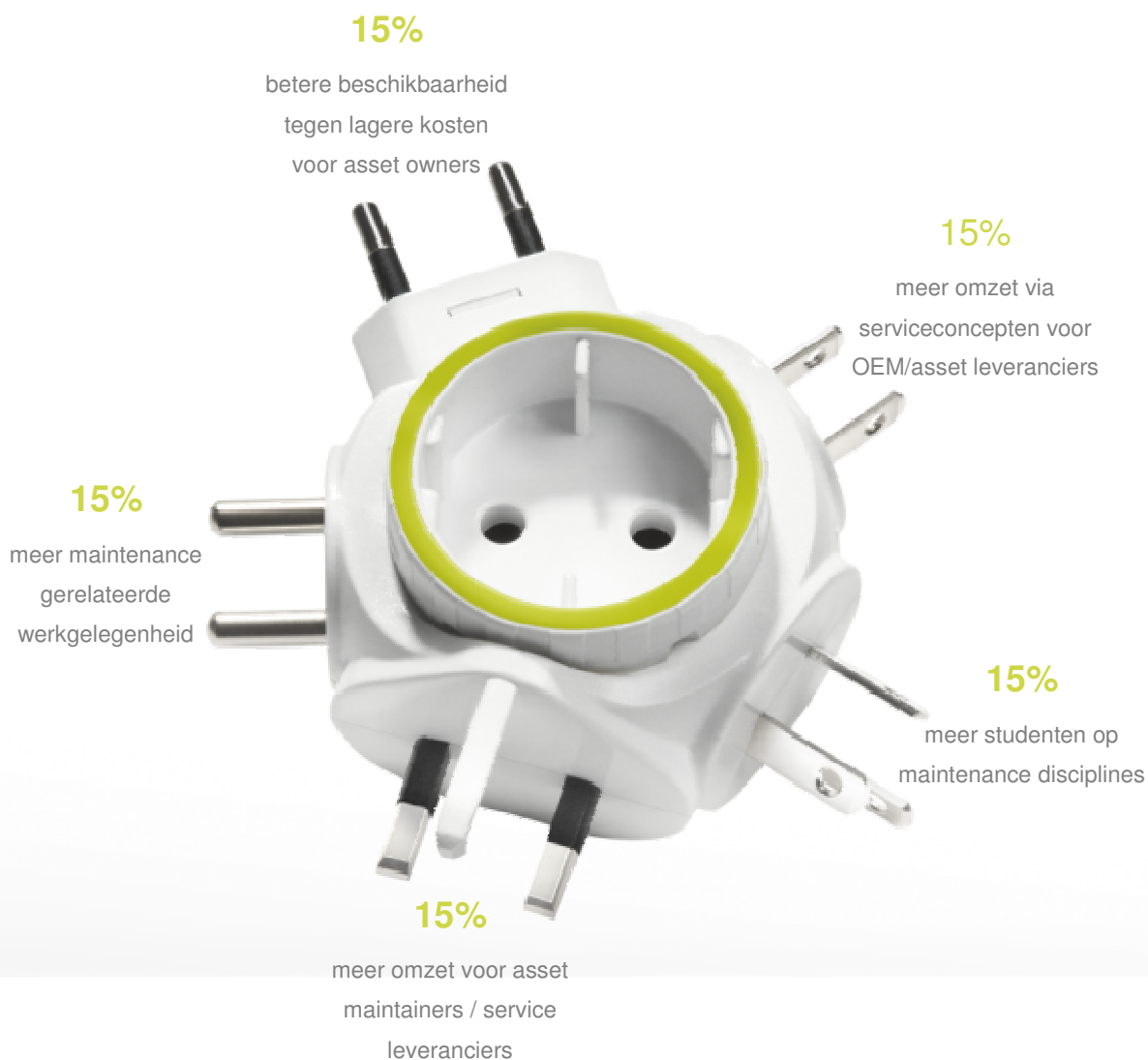


# Masterplan 2010-2014

## *Creating sustainable business together!*





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## Masterplan World Class Maintenance

juli 2009

# Voorwoord



Dr. Ir. A.W. (Aad) Veenman  
*Vrz. Raad van Toezicht i.o.  
World Class Maintenance*

## Onderhoud als hefboom voor de economie

Onderhoudsbewust ontwerpen van installaties. Fysisch faalgedrag van systemen begrijpen en daarop kunnen anticiperen. Langer uitnutten van installaties en daarmee investeringen uitstellen of voorkomen. De conditie op afstand bewaken. Uitvoering en logistiek rondom onderhoud effectief en efficiënt organiseren. En daar als land ijzersterk in blijven, zo de concurrentiepositie van de eigen industrie te verstevigen én deze onderhoudskennis, -producten en -diensten internationaal vermarkten. Dat zijn de ambities van World Class Maintenance in een notendop, een innovatieprogramma opgezet voor en door de sector. Professioneel onderhoud levert de hefboom, en draagt bij aan duurzame uitnutting van kapitaalgoederen, levert energie efficiency, leidt tot emissie reducties en resulteert in hogere veiligheidsniveaus. Maintenance creates sustainable business!

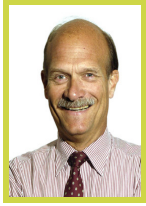


H.C. (Dick) Huybens MBR  
*Voorzitter NVDO*

## Cradle to Cradle & Maintenance

De Nederlandse vereniging voor doelmatig onderhoud (NVDO) is trots al vanaf het begin lid te zijn van de stuurgroep van het World Class Maintenance initiatief. De van oorsprong regionale samenwerking heeft zich weten te positioneren als aansprekend platform voor Onderhoudend Nederland. Na het in 2007 uitgegeven visiedocument over de Maintenance Repair & Overhaul- markt zal het nu voorliggende masterplan 2010-2014 verder gaan bijdragen aan een grotere bewustwording. Want door de toenemende schaarste van grondstoffen, de stijgende energiekosten in combinatie met de huidige economische situatie zijn nieuwe innovaties essentieel om onze delta blijvend te laten pieken.





ir. P.R.R. (Roelf) Venhuizen  
*Voorzitter Profion*

### **Volwassen worden door krachtenbundeling**

Met het visiedocument "World Class Maintenance in de Nederlandse Delta" is in 2007 de onderhoudssector en haar dynamiek, kansen en bedreigingen op uitstekende wijze in kaart gebracht. Samen met de NVDO en het World Class Maintenance programma zijn de krachten gebundeld om de sector de benodigde impuls te geven. In de meest recente Industriebrief (ministerie EZ) wordt ook het strategisch belang van onderhoud onderkend. Het verankeren van de aandacht voor onderhoud bij Ondernemingen (tot in de boardrooms), Onderwijs (op alle niveaus) en bij de Overheid is een kerntaak van Profion. Met dit innovatieprogramma voor de sector wordt hiervoor een structureel platform en middelen geboden, met een uniek, cross sectoraal karakter. Partijen hebben elkaar gevonden op alle niveau's en werken aan het behoud en versterking van de industrie. Get connected!



P.A.C.M. (Peter) van der Velden

*Voorzitter programma-  
commissie Pieken in de  
Delta Zuidwest-Nederland,  
Burgemeester van Breda*

### **Ambitieuze continuering van het Piekenbeleid**

Voor u ligt het Masterplan World Class Maintenance 2010-2014 "Creating sustainable business together!". In dit masterplan presenteert de sector een innovatieprogramma van € 50 miljoen. Kortom, een ambitieus plan.

Dat mag ook. Maintenance is voor Zuid-Nederland en in het bijzonder de Rijn-Schelde Delta een zeer belangrijk speerpunt. Met dit innovatieprogramma gaan we daar inhoud aan geven. Vanuit het Piekenprogramma is daarvoor de eerste aanzet gegeven. Ik vind het dan ook zeer plezierig te merken dat met grote voortvarendheid één en ander is opgepakt. Regionale verankering en nationale opvolging zijn noodzakelijk voor continuering van het succes.



## **Masterplan World Class Maintenance**

juli 2009

## Executive summary

### Maintenance is pivotal for The Netherlands

A competitive Maintenance, Repair & Overhaul (MRO, or maintenance for short) sector is essential for knowledge, skills and capital intensive economies like the Dutch. Equipment, installations and assets require effective service activities to avoid malfunctioning and to contribute to the Overall Equipment Efficiency. This is an important indicator which signals the ability for industries to operate cost effective in today's marketplace.

Increasingly, management within corporations appreciate that maintenance is not just a cost factor. As world class maintenance enables the prolongation of the lifetime of assets at favorable economic conditions, it transforms from cost to value driver. In addition it enables sustainable and safe use of assets. As such, world class maintenance is a prerequisite for optimal asset exploitation and thus a driver to sustain a high-end labor market for The Netherlands.

The size of the total MRO market in The Netherlands is approximately €18 billion in revenues, and 150.000 employees. The market is characterized by adequate and stable profit margins. MRO is both important on the demand side (as asset owners seek to improve the total costs over the entire asset lifecycle) as the supply side (it offers ample opportunity suppliers and service providers alike to develop new profitable revenue streams both business inside and outside The Netherlands).



### World Class Maintenance supports the development of world class “supply chains” & hot spots”

It is World Class Maintenance's (WCM) mission to provide strategic guidance and operational support regarding knowledge development and innovation within supply chains for Maintenance Repair & Overhaul in various sectors. WCM also supports the development of hotspots with concentrated Maintenance Repair & Overhaul activities, research, education and training.

For the larger part this is done through innovative projects carried out by cooperating companies (in the supply chain and across sectors), schools, institutes and universities.

### Existing maintenance initiatives join forces to become World Class in South West Netherlands

In the recent years, four initiatives – World Class Maintenance Consortium (WCMC, for large asset owners), Maintenance Competence Center (MCC, for the entire MRO community), Maintenance Education Consortium (MEC, for educational institutions) and Program Office World Class Maintenance (PO WCM, for public relations and business development) – have been successfully launched, in South West Netherlands<sup>1</sup> and in close collaboration with NVDO<sup>2</sup> and Profion<sup>3</sup>.

To improve overall effectiveness, the existing initiatives have been started under a guiding letter of intent that they will converge into one overall World Class Maintenance organization (WCM) in spring 2010. This master plan is the result of the intention of the four initiatives to merge activities in 2009 and

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<sup>1</sup> South West Netherlands is the region consisting of the province Zeeland in combination with the Western part of the province Brabant.

<sup>2</sup> NVDO: Nederlandse Vereniging voor Doelmatig Onderhoud (Dutch Society for Effective Maintenance).

<sup>3</sup> Profion: Branchevereniging voor Professioneel Industrieel onderhoud (Dutch Federation for Professional Industrial Maintenance).



represents the plans for World Class Maintenance in the period 2010 – 2014.

Going forward, WCM will be the platform to connect all relevant parties in the Netherlands and realize the joint ambition, together with NVDO and Profion of establishing a World Class Maintenance cluster in The Netherlands.

### **World Class Maintenance serves a knowledge community**

Maintenance is multi-disciplinary and pivotal to many industry sectors. Within the scope of WCM these are: Aerospace, Maritime, Energy, Infrastructure, Process industries. These industries are well established in South West Netherlands supported by a strong logistics infrastructure, and many firms have already started collaboration with other participants via one or more of the running initiatives.

World Class Maintenance has the objective to support the participants to realize their individual maintenance objectives. WCM has the legal structure of a non-profit Foundation. The WCM master plan embodies a unique and aligned collaboration of all relevant parties – asset owners, suppliers, service providers, knowledge centers, universities and regional governments – with respect to maintenance, in all parts of the value chain and across all relevant sectors.

Despite first successes, collaboration with other parties never comes easy. The role of WCM in initiating, facilitating and manage joint projects is required for at least the coming five years.

### **World Class Maintenance has a '5x15%' ambition**

World Class Maintenance's ambition is to be the cohesion between all members to realize tangible objectives for individual participants. For the period 2010 – 2014 the ambition is formulated as '5 x 15%':

1. For asset owners: 15% lower integral costs.
2. For asset providers: 15% more revenue.
3. For service providers: 15% more revenue.
4. For education: 15% more students at the required level and the foundation of a Maintenance Top Institute.
5. For society: 15% more maintenance related employment.

### **Knowledge projects are the key differentiating factor of World Class Maintenance**

WCM aims for international recognition for The Netherlands as the leading region with respect to MRO, with South West Netherlands as the pounding heart. Collaboration projects to (i) develop knowledge, (ii) disseminate knowledge and (iii) commercialize knowledge are at the basis of WCM<sup>4</sup>.

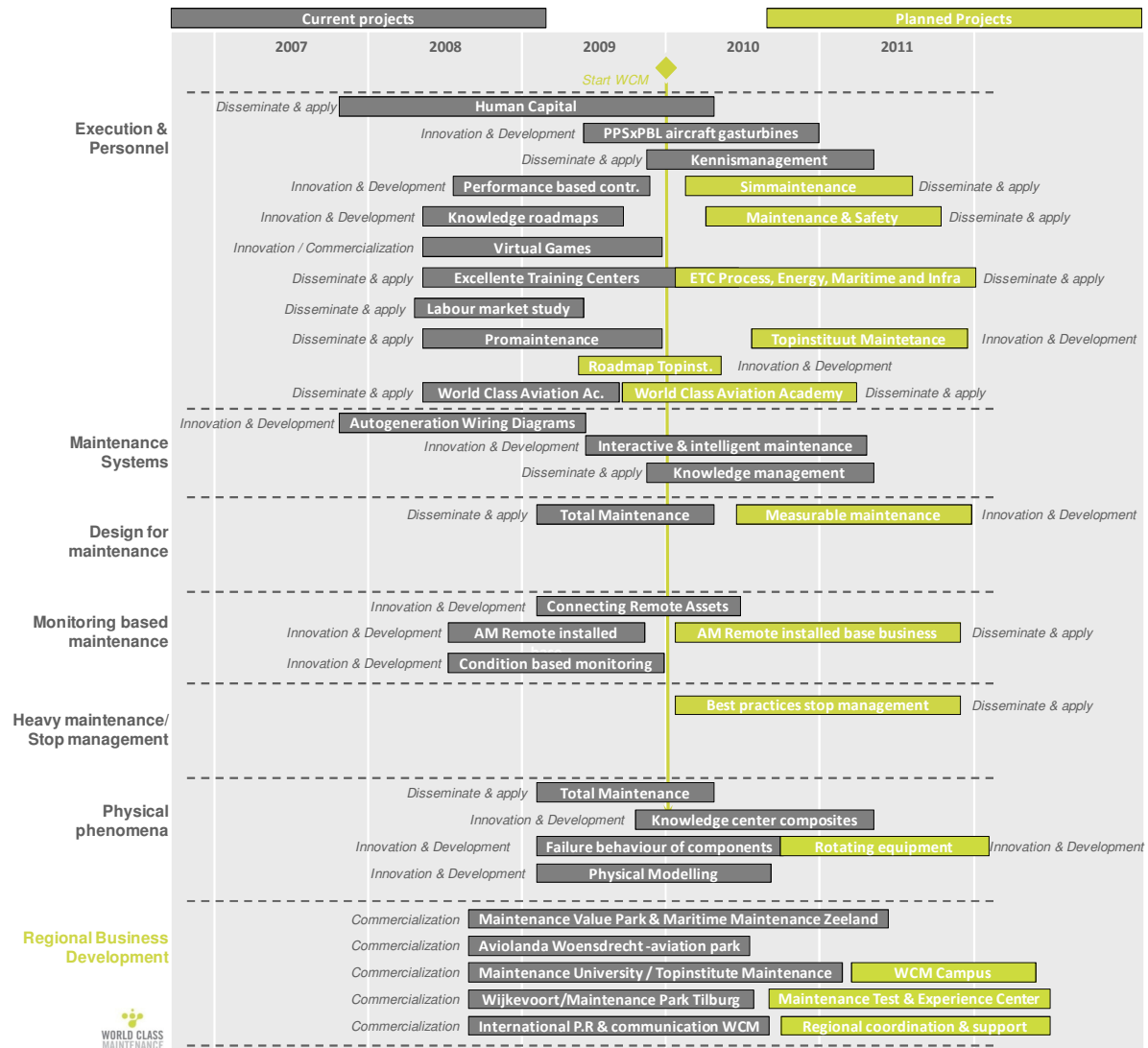
The activities of WCM are primarily geared towards the initiation and facilitation of knowledge projects. These projects are the core of WCM and consume the lion share of the budgets. Project proposals are submitted by participants, in one of the three focus areas 'knowledge', 'know how' and 'money'. The projects are approved based on criteria defined by the **innovation agenda**, which is governed by an independent Scientific Advisory Board. Finally projects are executed via multiple WCM members and facilitated by WCM via project management, project office and project administration services.

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<sup>4</sup> In Dutch this is called: Kennis, Kunde & Kassa.



To keep this mechanism going, the future Top Institute Maintenance will drive new developments and serve as point of contact for research questions from industry. Next to supporting collaboration projects, WCM offers general services to support knowledge dissemination, like yellow pages, workshops, magazines and blueprints. Execution of these services is in close collaboration with NVDO and Profion.



Join WCM and pre-register as member, sponsor or participant in the program and projects that will guide you towards World Class Maintenance. **Creating sustainable business together!**



# Masterplan World Class Maintenance

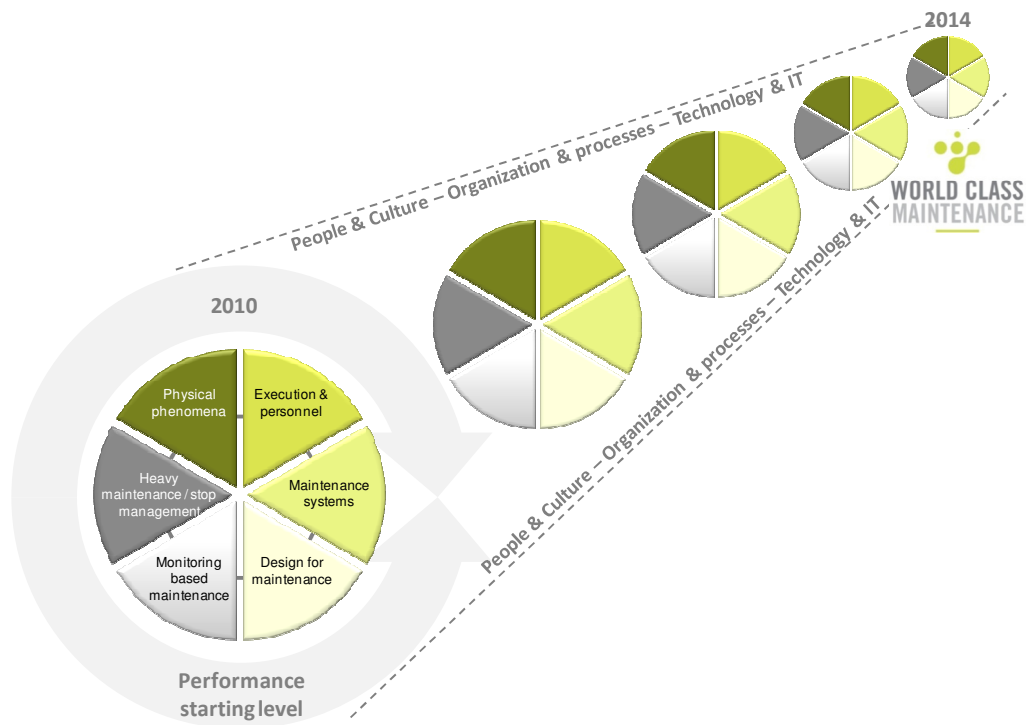
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**Significant budgets are estimated to realize the World Class ambition by 2014**

For the period 2010 – 2014 the total required budgets add up to **€50 million**, or €10 million per year. Funding strategy is based on a public-private partnership (PPP), the participants and members of WCM (industries, knowledge institutes) contribute time and cash, co-funded by the Dutch Ministry of Economic Affairs and other public parties.

**Get connected!**

Many firms have already joined the World Class Maintenance community, and new projects in the WCM Masterplan will start in 2010. The value of a community increases by the square of the number of participants; more qualifying members are always warmly welcomed.



**Masterplan World Class Maintenance**

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