

The MAN AG consists of 4 Divisions



The MAN Group

MAN Nutzfahrzeuge



MAN Ferrostaal



MAN B&W Diesel



MAN Turbo

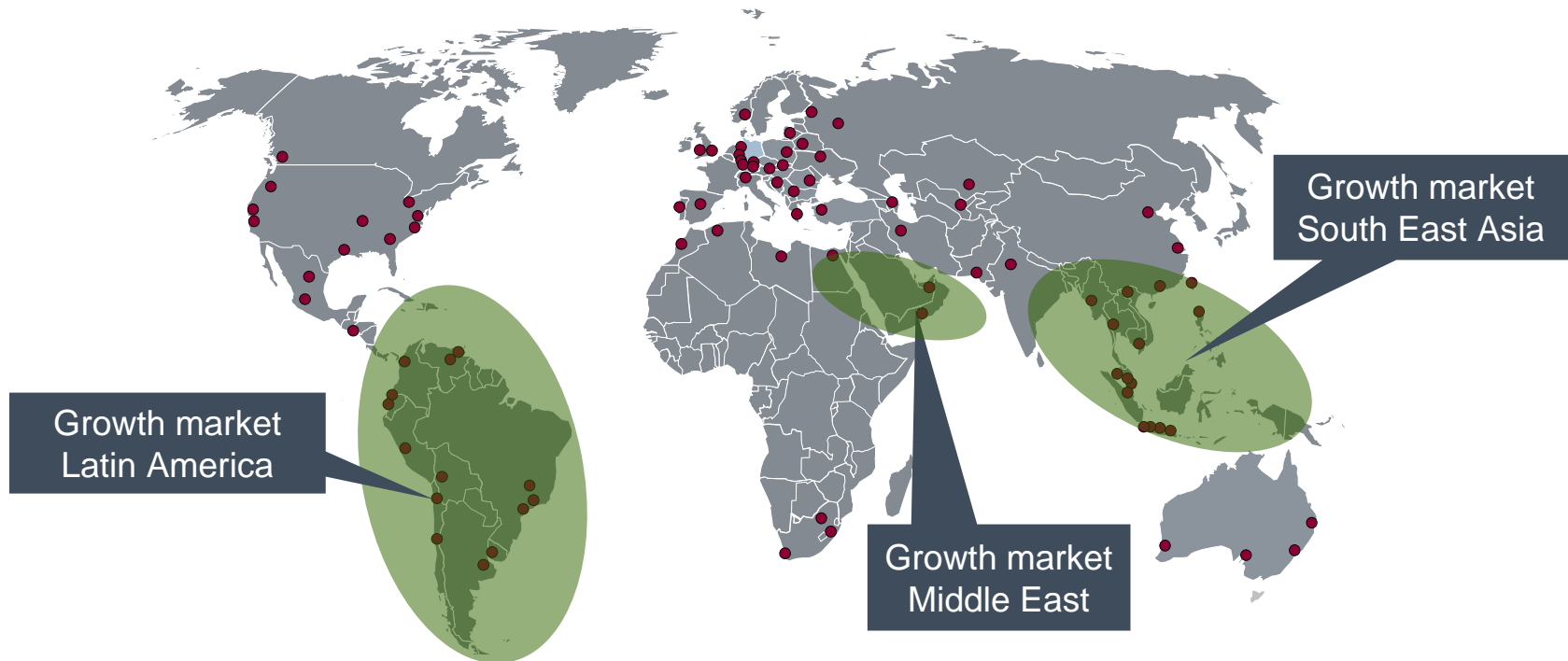


MAN Ferrostaal is the most international Business Area of the MAN Group



MF is **active** in more than **60 countries**

More than **90%** of the **turnover** is generated **outside Germany**



Growth market
Latin America

Growth market
South East Asia

Growth market
Middle East

About **50%** of our employees work **abroad** (~2,150 employees)

MF established a **close meshed sales network** in growth markets

With our Projects division we provide turnkey Industrial Plants worldwide



MAN Ferrostaal Group

Projects

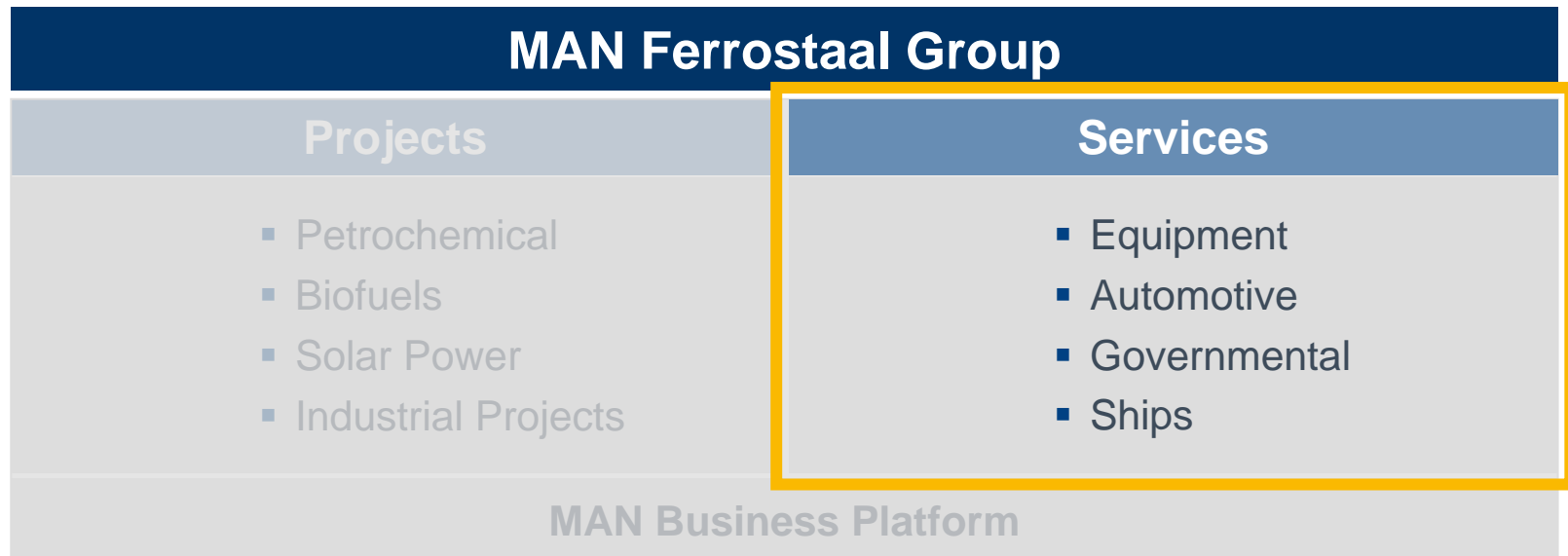
- Petrochemical
- Biofuels
- Solar Power
- Industrial Projects

Services

- Equipment
- Automotive
- Governmental
- Ships

MAN Business Platform

Four Business Units contribute to the positive Results of “Services“



...which are managed by us along the entire Value Chain



MAN Ferrostaal is managing the entire Value Chain of Large Scale Projects

1) EPC: Engineering, Procurement, Construction

MF Managed by MAN Ferrostaal
Provided by MAN Ferrostaal

P Managed by MAN Ferrostaal
Provided by strong partners

**We offer state of the art
Petrochemical Plants to our Customers**



We secured access to the Parabolic Trough Collector technology...



1) Parabolic Trough Collector

- +**
 - Highest maturity of technology & approved for large scale commercial projects
 - Accepted as „proven technology“ by project financing banks
 - Materials, components, manufacturing & handling at an industrial level
 - High degree of efficiency (absorber tube always in focal point)
- - Expensive manufacturing of collectors / mirrors
 - Requires very stable mirror support structure (susceptible to wind)
 - Complex logistics



... as well as the Linear Fresnel Collector Technology



2) Linear Fresnel Collector

- ➕
 - System of flat mirrors → lighter mirror support structure
 - More simple regarding production, handling, construction & operations
 - Local sourcing of key components
 - High degree of standardization
 - No heat exchanger required due to direct steam generation
- ➖
 - Slightly lower degree of efficiency
 - Still being tested for commercial large scale usability (Demonstration plant Almeria, Spain)



We focus on Biofuels 1st Generation Technology and pursue developments of 2G



Today's focus

1st generation Biofuels

Bioethanol from sugar or starch crops

- +
 - Is being produced at commercial scale
 - Standardized process technology
 - Lower investment required
 - Political support: e.g. mandatory additives to petrol
-
- - Competition for limited feedstock; Price volatility for input factors
 - Low entry barriers and limited options for technological differentiation

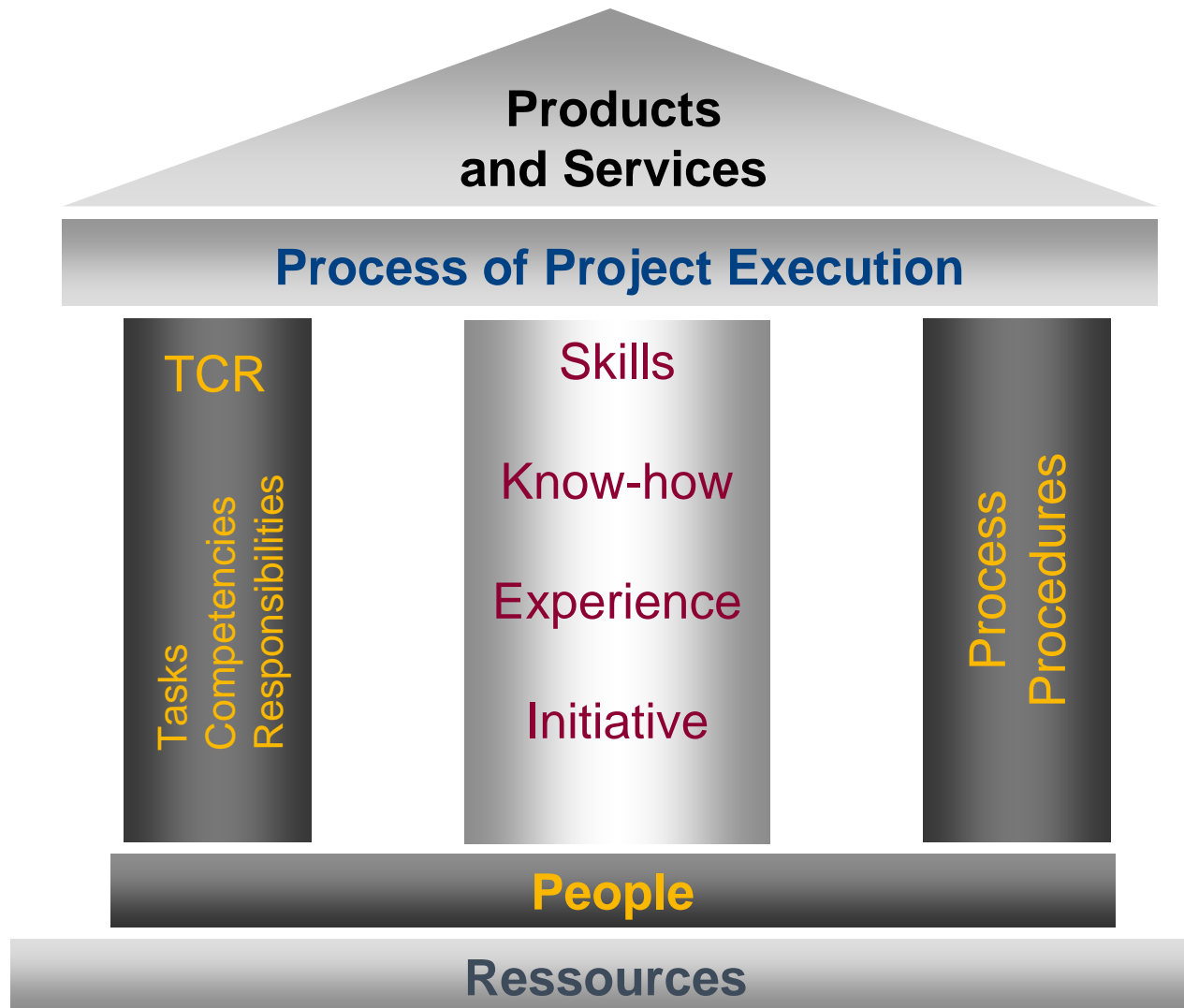
Future focus

2nd generation Biofuels

Bioethanol from lignocelluloses biomass → BTL

- +
 - Non-food crops as feedstock: Low value agricultural crops
 - Refinement of residues
 - Higher availability of input factors
 - Improved CO² balance
-
- - Technology is currently being developed
 - Higher investment required

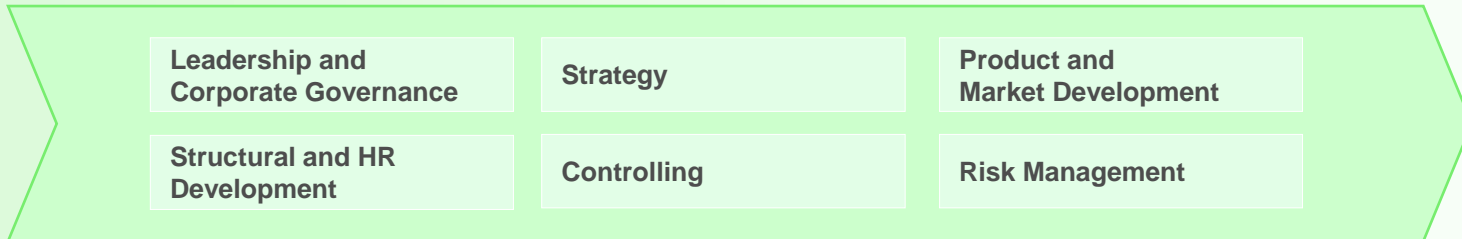
QM – The House of Quality Management



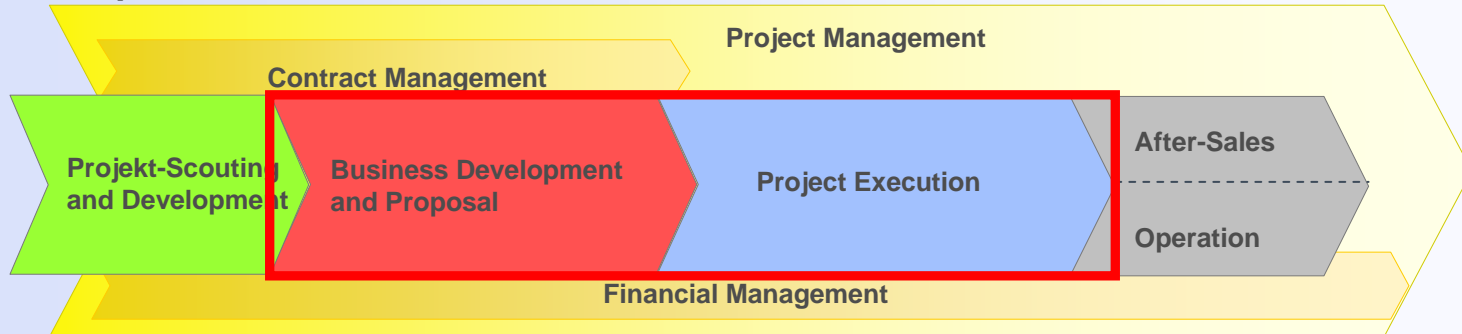
Business Processes of MAN Ferrostaal



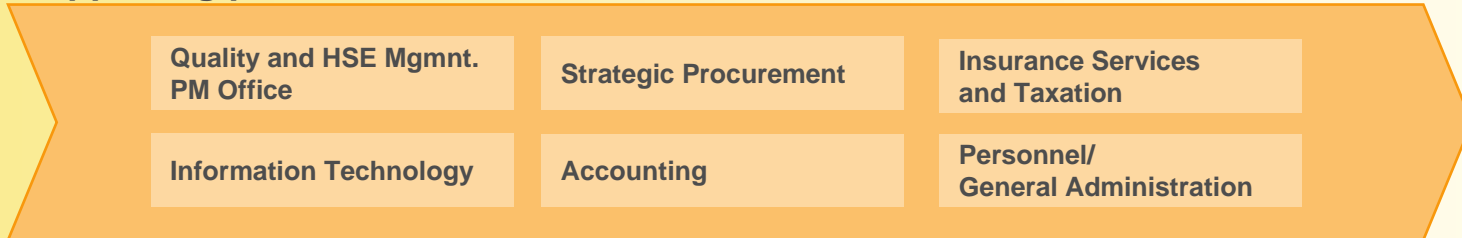
Management processes



Core processes



Supporting processes



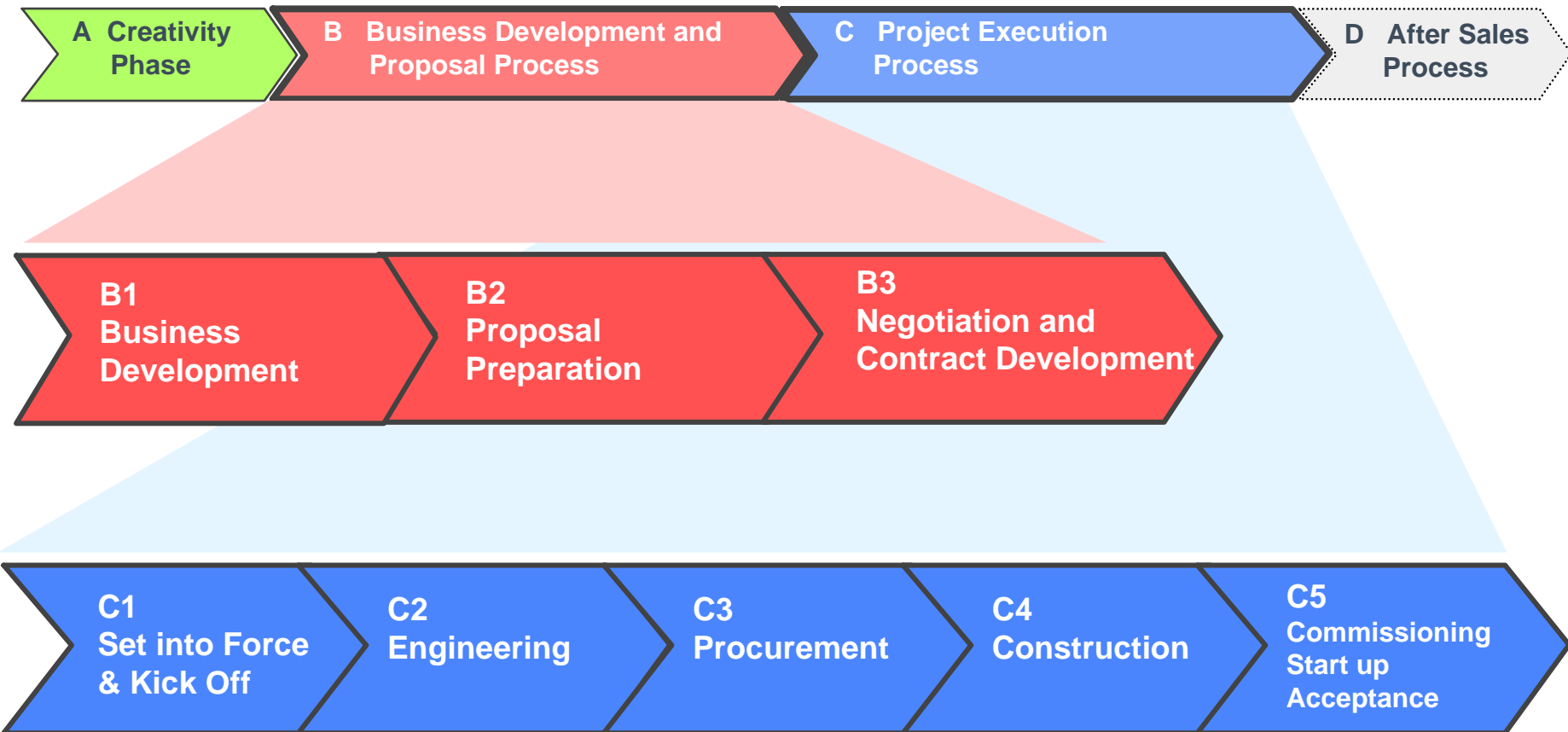
Customer – Partner – Supplier

Customer – Partner – Supplier

QM – Processes of the Value Chain



Turning Ideas Into Reality





Feedback Nutzungsbedingungen Volltextsuche an/aus



Qualitätsmanagement
MAN Ferrostaal Gruppe

QM - Allgemein

Profil

Glossar / Übersetzung

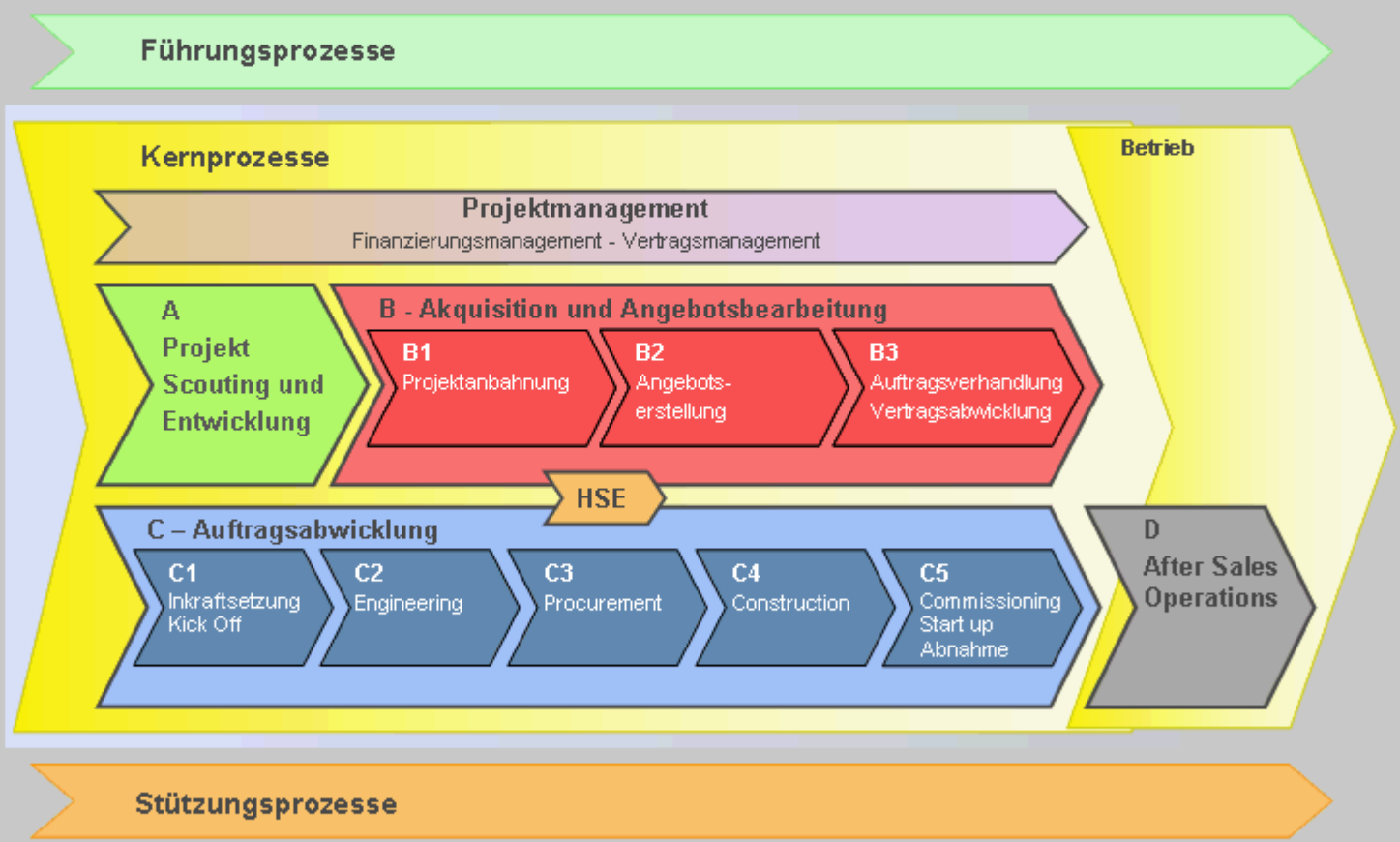
QM - Dokumente

nach Prozessen

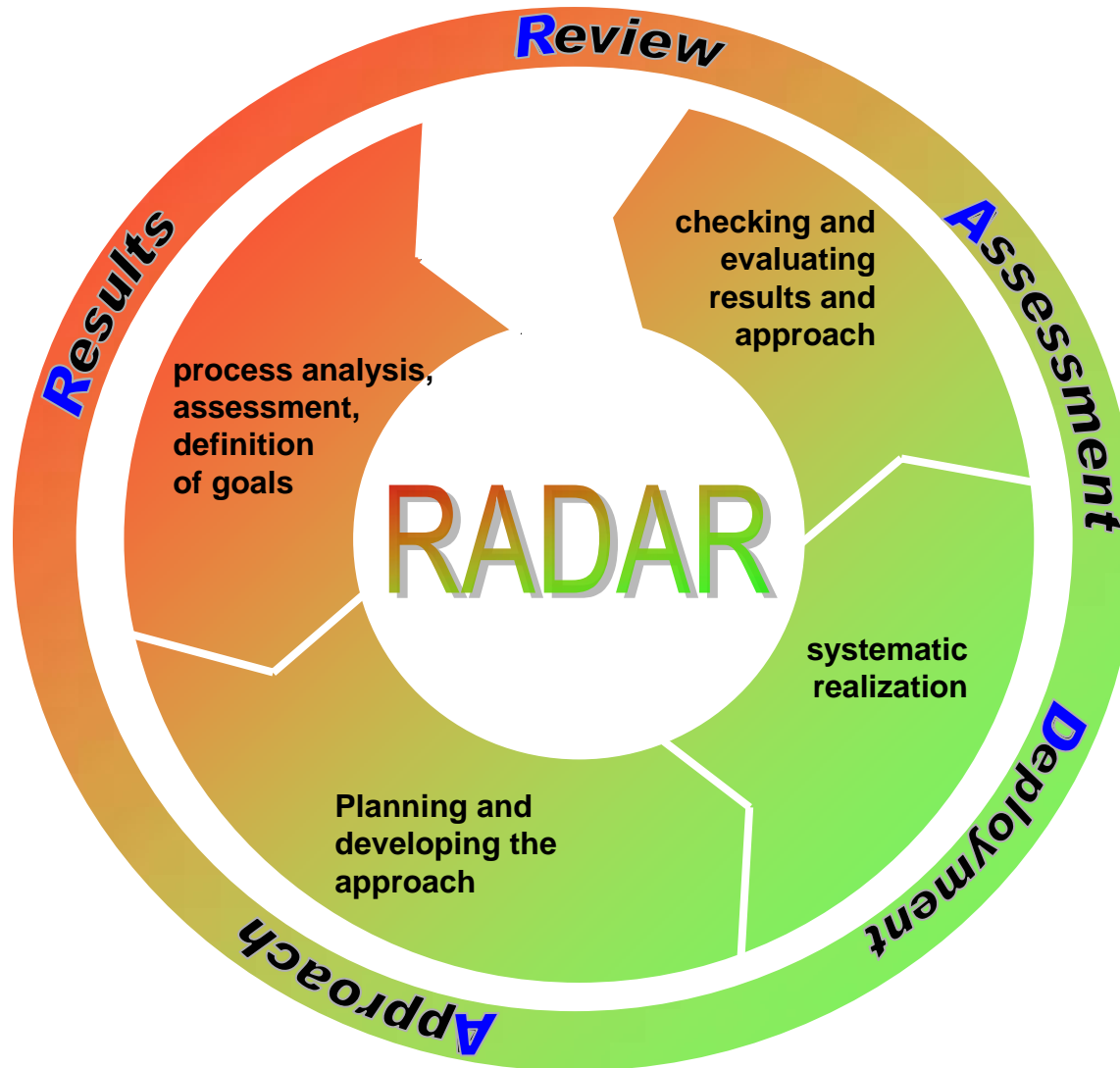
Alle Anweisungen

Alle Formulare u. Vorlagen

Engineering / Construction



QM – Continuous Improvement Process



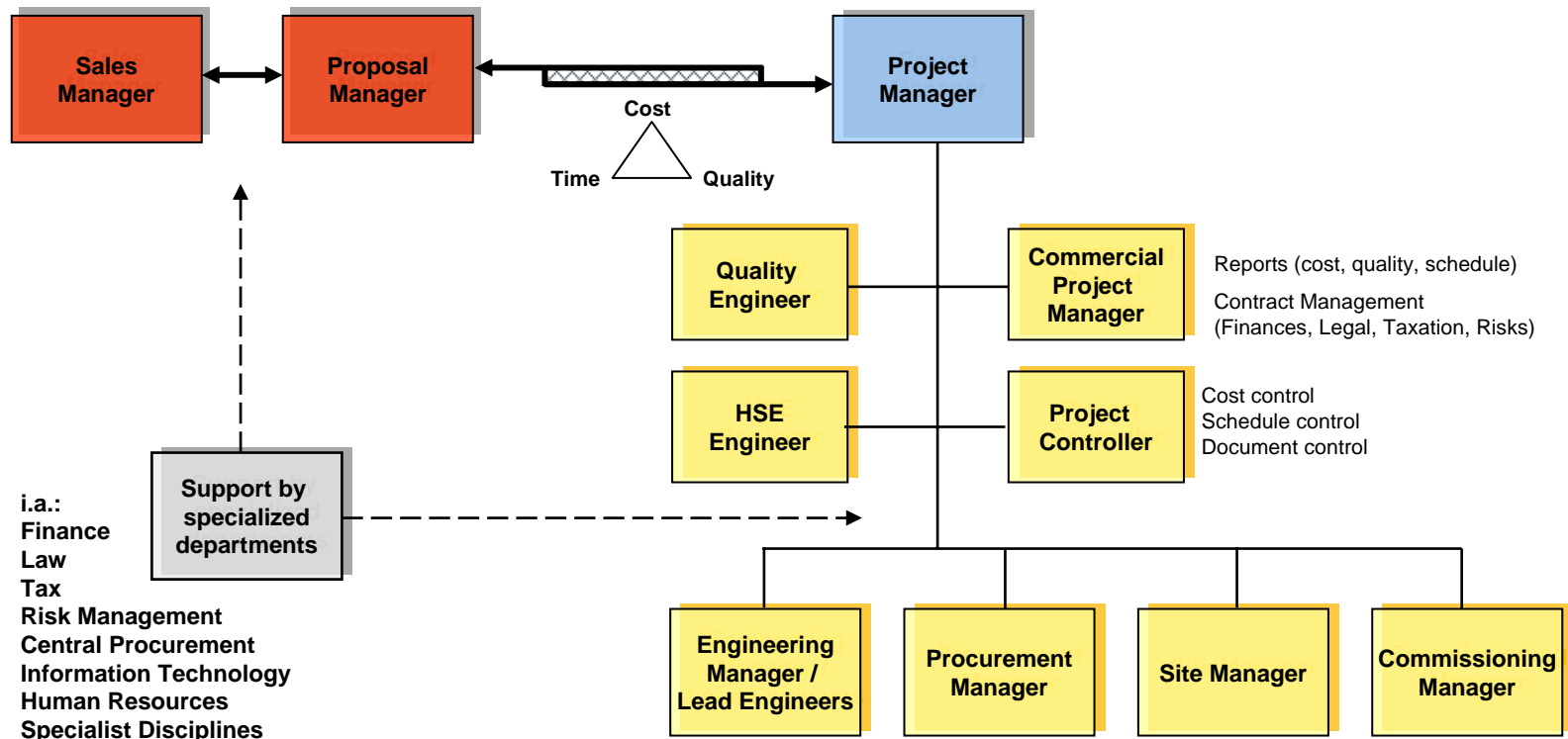
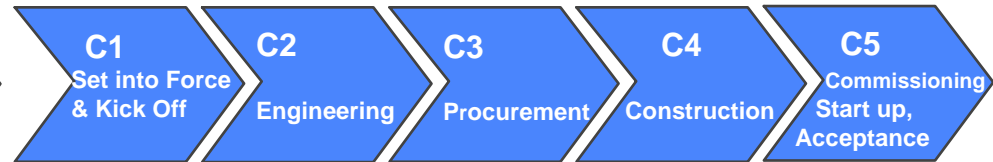
QM – Project Organization



Development and Proposal Process



Contract Execution Process



PM system: Workflow, Project Check, Approval

