PHARMACEUTICAL
CONSULTANCY
SERVICES

Quality System(s)

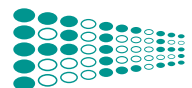# Jaap Koster

WHAT IS THAT; QUALITY ?

There are multiple understandings, depending from which angle you are answering the question:

- Logistically right time, place and amounts

- Financially   right price

- Technically right product!
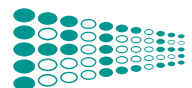
General definition :

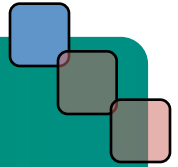FITNESS FOR INTENDED USE

The client returns (and not the product)

WHAT IS THAT; QUALITY ?
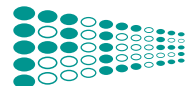
In our (pharmaceutical) world:

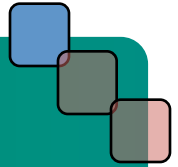**Product meets (assured), the requirements as described in the Regulatory Dossier**

BUT NOW:
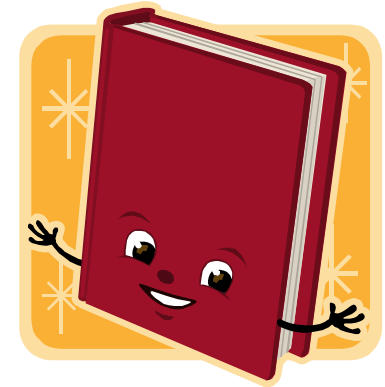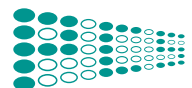
WHAT IS A

QUALITY*SYSTEM*?

1st What does system mean ?

(GOOGLED)

- A group of interacting, interrelated, or interdependent elements forming a complex whole.

- A condition of harmonious, orderly interaction complex.

- An organized and coordinated method; a procedure

- A naturally occurring group of objects or phenomena

Ok, so what is a Quality-System ?

- A Quality **System** (for us) is an holistic approach:
  There is no exception (it's all)

- Systems
- People
- Equipment
- Buildings/Premises
- Utilities
- Products
- Processes
- ....

Your companies system should assure that the above assets
delivers a product consistent according specification, fit for
purpose.
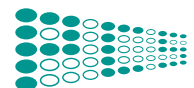
Finally, we can define system elements

- Documentation
- Training
- Deviations
- Change Management
- Equipment Management
- Vendor management
- Sample management
- Out of Specification
- Stability
- Etc.

The above mentioned Quality System Elements should assure that the principle stated in former slide manages the assets properly.
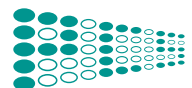
QMS or QMS Elements

Depending on how you like to call it:

- The individual items (deviation, training, etc) are called elements of the overall Quality Management System
- OR the individual item is called a Quality System and the overall is Quality Management Systems
- OR maybe other views
- Either way: it should do the job.
- For now: I use the term Quality System and the individual items elements of the QMS (completely arbitrary)
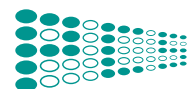
A table with QMS-elements (not limited)

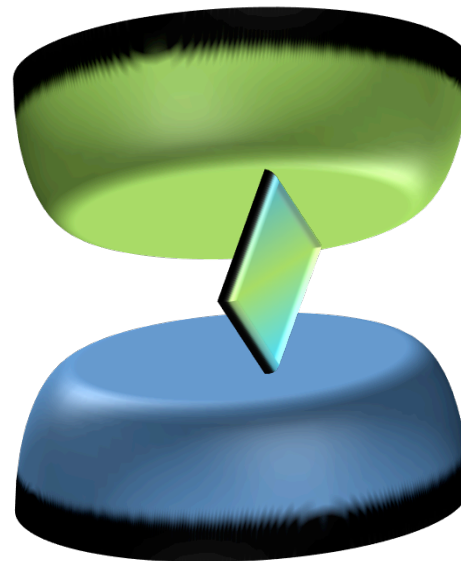|	
Change Control/Management	Training
Deviation/NC	Distribution
CAPA	Artwork
Complaints/Incidents	Audit System (Internal/External)
PQR/APR	Documentation
Recall	CMC maintenance
Destruction	Technical Transfer
Vendor Management	Pharmacovigilance
Quality Control	Clinical Studies
On-going Stability	Marketing Material
Enquiries	Regulatory Affairs
Validation/Verification/Qualification	Data Management
External Inspections	Investigations
Facilities / Utilities / Equipment	Development Studies
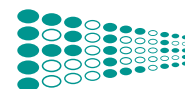
US QUALITY SYSTEM APPROACH
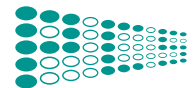
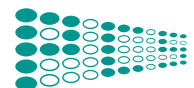# QMS should be supported by the organizational systems

- Material Control System
- Production and Process Control System
- Records and Document Control System
- Facility and Equipment Control System
- Laboratory Control System
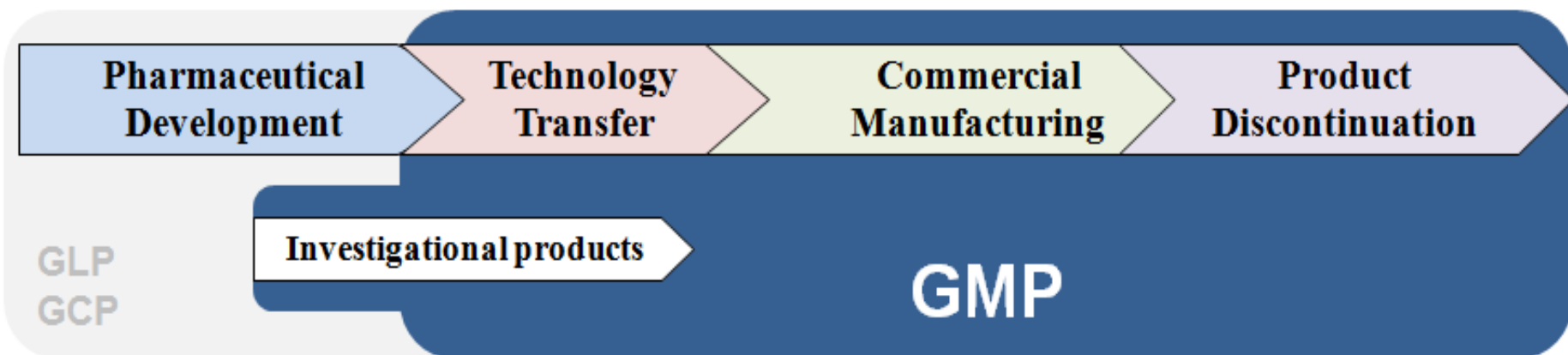- Divergences Control System
- Validation
- ....

Control Systems

- Responsibilities
- Management Review
- Continuous Compliance
- ....

Organizational Systems

Pharmaceutical Development → Technology Transfer → Commercial Manufacturing → Product Discontinuation

GLP
GCP

Investigational products

GMP

Management Responsibilities

PQS elements

Process Performance & Product Quality Monitoring System
Corrective Action & Preventive Action (CAPA) System
Change Management System
Management Review

Enablers

Knowledge Management

Quality Risk Management

| Pharmaceutical Development | Technology Transfer | Commercial Manufacturing | Product Discontinuation |

Investigational products

GMP

Management Responsibilities

PQS elements

Validation and Qualification System
Operations Control System

Process Performance & Product Quality Monitoring System
Corrective Action & Preventive Action (CAPA) System
Change Management System
Management Review

Enablers

Knowledge Management

Quality Risk Management

We are talking about the same system.
Depending on where you stand, you might see something else, however it's still one system.
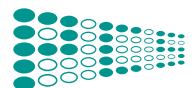
Performance or Quality ?

- Quality is **<u>not</u>** a specific Pharmaceutical topic

- Basic principle: good performance on the QMS-elements delivers a well functioning QMS and as a result: Right Quality

- Well performing QMS supports short- and long term business objectives.

- One of the key/**<u>mandatory</u>** objectives for short- and long term business objective MUST be (in pharma/vaccine world): safety/efficacy/quality for the recipients.

- GMP requirements MUST be built in, in yours' QMS.

- A QMS cannot create miracles (!)
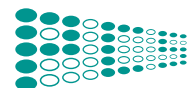
CHANGE CONTROL & DEVIATIONS
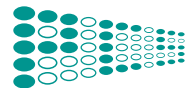
CHANGES VS. DEVIATIONS

- **"CHANGES"**
  - Normally: **planned**
  - Starts: **before** execution

- **"DEVIATIONS"**
  - Normally: **unexpected** (unplanned)
  - Starts **during** regular work

- **PLANNED DEVIATION vs. TEMPORARILY CHANGE**
  - In English Planned Deviation might be a contradiction, however in other languages completely normal
 - My personal opinion: it doesn't much matter how you call it, as long as you arrange it (decently)
  - Batch Records......
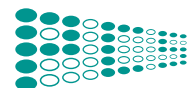
CHANGE MANAGEMENT: WHY

- Preventing undesired changes

- Careful considerations

- Planning of associated actions (SOP's/Validation)

- Communication of change

- Correct Documented Change.

➡️   CONTROLLED PROCESS FOR CHANGE

- Many ways to manage, e.g. Documentation (wherein the document itself the changes are managed)
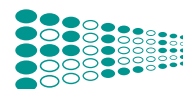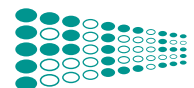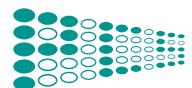
CHANGE CONTROL SOP

DEVIATIONS

DEVIATIONS

1. Details

2. Correc-tive Action (CA)
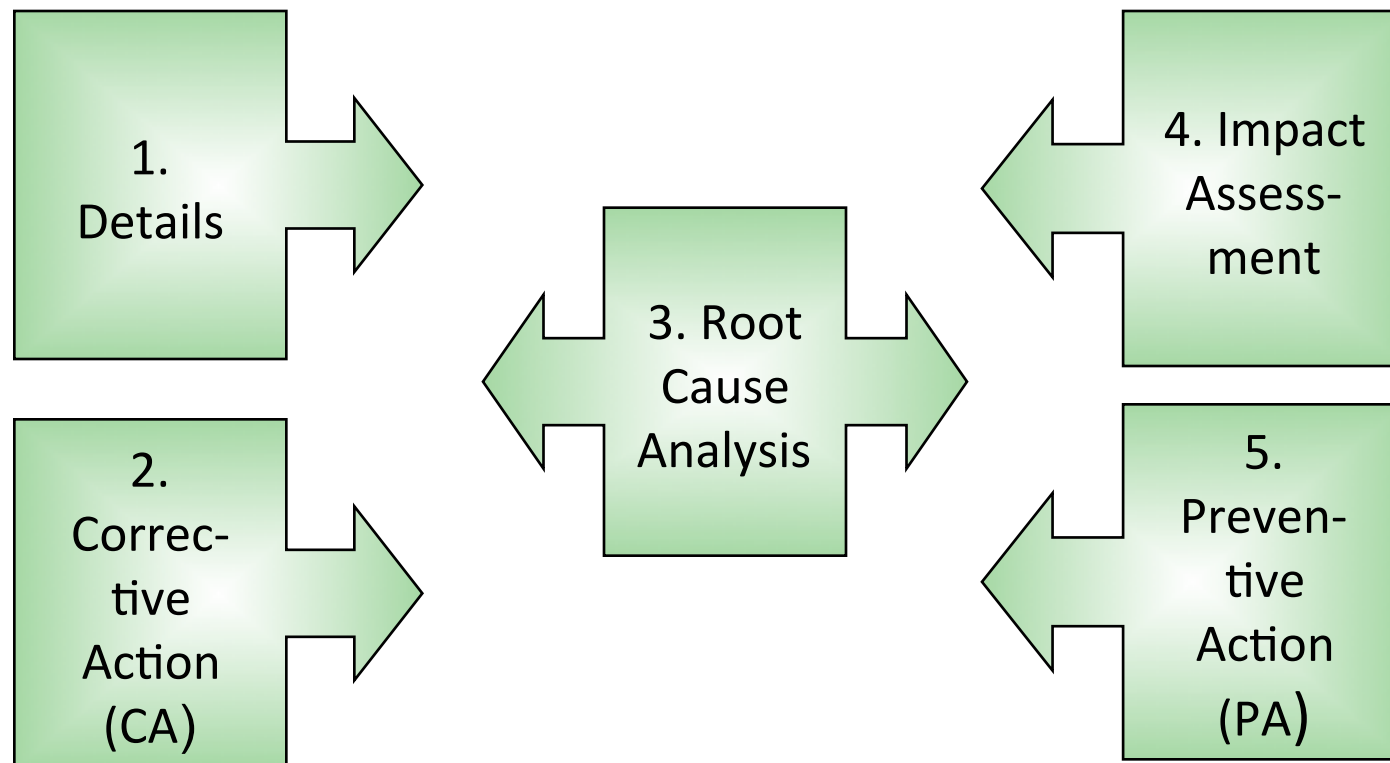
3. Root Cause Analysis

4. Impact Assess-ment

5. Preven-tive Action (PA)
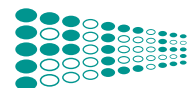
# SYSTEM FAILURE INVESTIGATION

The process:

1. Documented Deviation
   – Timely: notification at least within 24 hours
2. Correction
3. Investigation into the root cause
4. Corrective Action(s) (CA), prevent recurrence
5. Scale and seriousness (Impact Assessment)
6. Preventive Action(s) (PA)
   – Root Root Cause Anal
   – Risk Assessments

Industry Practice: close deviations in 30 days
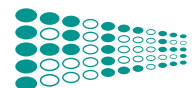
- CAPA systeem
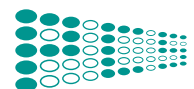
22
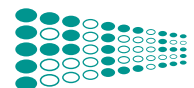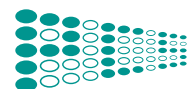
TRAINING

TRAINING REQUIREMENTS

Or better: knowledge management (?)

- Per employee

  - Plan (e.g. per year and during induction)

  - CV (Resume)

  - Each training

  - Job Description
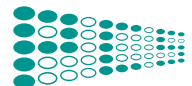
- Traceable

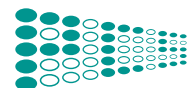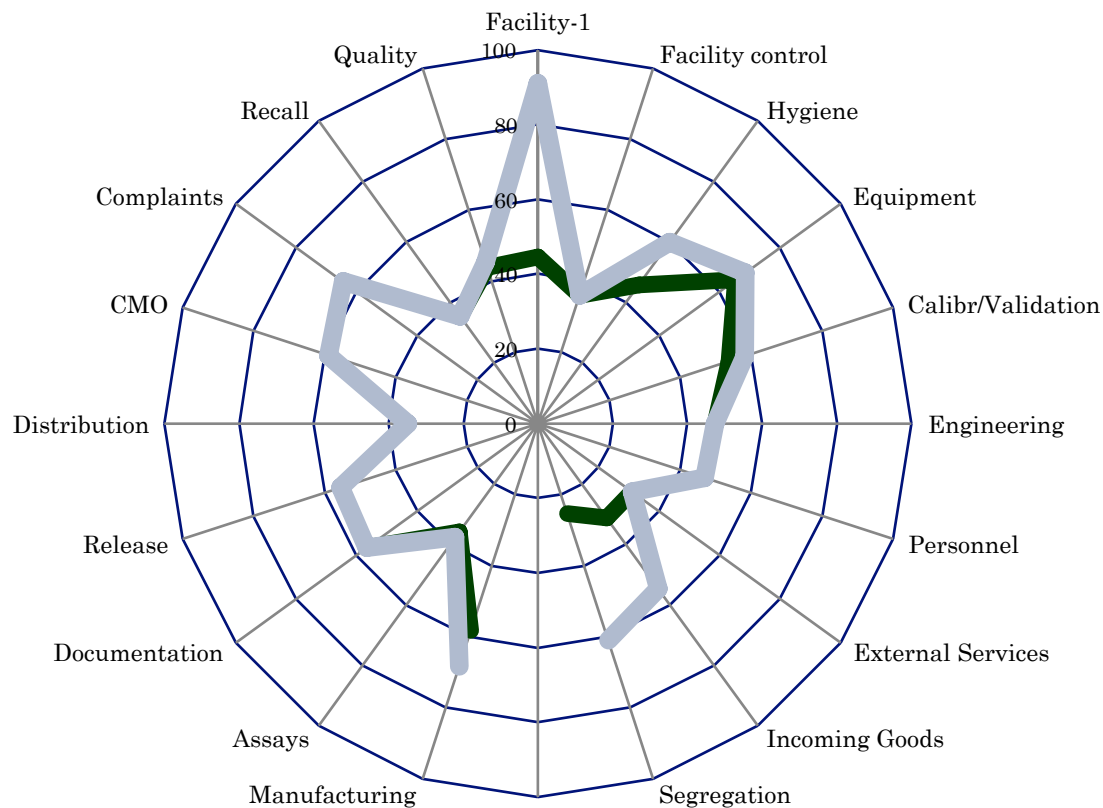- Overview for management

CONCLUSION

Other QMS-Elements

- Per individual QMS Element

  - Company Requirements

  - Regulatory Requirements

- Interactions between Requirements and/or
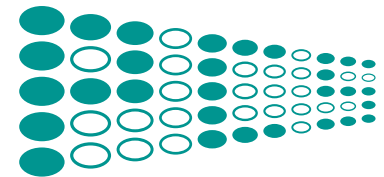
  Departments and/or Sites

Checklist per QMS-Element

An example assessment of a QMS, including progress per element

THANK YOU FOR YOUR ATTENTION

PHARMACEUTICAL CONSULTANCY SERVICES

Veluwemeer 112
3446 JD Woerden
T   +31 (0)182 – 503 280
M +31 (0)6 – 23 047 982
F   +31 (0) 182 – 502 589
info@pcs-nl.com
www.pcs-nl.com