**INBOUND DASHBOARD – IT REQUIREMENTS  
Schenker Singapore – Volkswagen**

1. **General**

* Colour-coding of utilization rate categories:

1. Over-utilization (>=85%): Red
2. Risk of over-utilization (80% - 85%): Yellow
3. Safety range (50% - 80%): Green
4. Under-utilization (<50%): Blue
5. **Reports from SAP**

* FUNC: Lx03 “Bin Status Report” – <File: Lx03>
* QUERY: Sq01 – S2C – Warehouse – “Outstanding Shipment Notifications” – <File: Master Data>
* FUNC: bin status report!

1. **System Information**

**Dashboard Section 1: Current**

Report generation:

* Link Dashboard to <File: Lx03>

Requirements:

* Generate count of empty and occupied locations under each bin type *<Tab: Piv\_Lx03>*
* Empty locations are Storage Bins without any Material
* Occupied locations are Storage Bins with indication of Material
* Automatic calculation of utilization rate on bin type level based on

(Count of Occupied Locations / Total Count of Locations)

* Automatic colour-coding of utilization rates

**Dashboard Section 2: Projection**

Report generation:

* Link “Projected New Locations Occupied 17Mar – 23Mar” to <File: Master Data>

Requirements:

* Steps to obtain Projection:

1. Remove materials found in current inventory based on <File: Lx03>
2. Link report to “Containers Macro Update” to generate ETA dates
3. Sort according to ETA date, from earliest to latest
4. Pivot data based on Material, to remove duplicate material information
5. Filter and pivot data according to ETA date, on a weekly basis to obtain *<Tab: MD\_17-23Mar>*
6. Replace “#N/A” values with “0”
7. For storage levels, incoming quantity is the sum of all incoming quantities for bin types in the respective storage level

* Repeat for each week based on date category
* Calculation of projected utilization rates for each bin type based on   
  (Last ending Occupied Locations + Projected New Locations Occupied) / Total count of locations

*\*\*For storage type levels, count of new locations occupied is the sum of all new locations occupied for bin types in the respective storage level*

*\*\*Automatic conversion of “N/A” values to zero*

**Dashboard Section: Previous Week**

* Total count of locations freed up to be generated using the following formula for each storage / bin type:

(Previous week’s occupied locations + Previous week’s projected new locations occupied – Current occupied locations)

*\*\*Automatic conversion of “N/A” values to zero*

1. **Graphical Display**

**Chart: Current Utilization Rate – Storage Type Level**

* Bar chart to be generated based on current utilization rate for each storage type

Functionalities:

* Function to:

1. Zoom in to graphical display of percentage of each utilization rate category under each storage type *<Tab - Zoom: Storage Type UR>*
2. Zoom in to actual bin types with respective utilization rates *<Tab: Zoom – Storage Type UR>*
3. Zoom in to actual empty and occupied bin locations *<Tab: Zoom 2 – Storage Type UR>*

**Chart: Utilization Rate – Bin Type Level**

* Bar chart to be generated based on actual current utilization rate and projected utilization rate for future weeks on bin type level   
  \*\*Filter out utilization rates on storage type level before generation of chart

Functionalities:

* Function to:

1. Zoom in to actual bin types with respective utilization rates *<Tab: Zoom – Bin Type UR >*

**Chart: Bin Locations Occupation Rate**

* Total count of new locations occupied to be generated based on previous week’s “projected incoming new items”
* Total count of locations freed up to be generated using the following formula for each storage / bin type:

(Previous week’s occupied locations + Previous week’s projected new locations occupied – Current occupied locations)

\*\*Convert all negative values to zero

Functionalities:

* Function to:

1. Zoom in to actual bin types with respective occupation/freed-up rates *<Tab: Zoom – Locations Freed Up>*
2. **Other Reports**

**Historical Reports**

* Database of historical weekly utilization rate on:

1. Storage type level
2. Bin type level

Functionalities:

* Function to:

1. Select required storage type/bin type(s)
2. Select required dates for display of trend line and information
3. Compare trend of different storage types/bin types