Systems Yield Success

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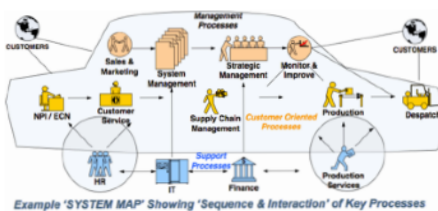
yes

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Improve your business with Training & Consultancy on Process based Systems & obtain third party Approval when required e.g. ISO 9001 / IATF 16949, with all of its many extra requirements.

See also the SYS Brochure, numerous published articles & the website for more.

Systemsys Ltd: **"Providing Support to Industry since 2005"**

Note this Guide can be saved in different formats, e.g. iBooks on Apple.

Example 'SYSTEM MAP' Showing 'Sequence & Interaction' of Key Processes

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Contact
*If there is anything that we can do to support you, then do let us know for example via the '*__contact us__*' page of the website; __www.systemsys.co.uk__.*

Alan Keffler, Director.   BEng, CEng, Consultant & Master Trainer.
e-mail: __alan@systemsys.co.uk__,   Tel: 07947676705

Improving your Business

1. Context of Organization Standard 4.1

▸ **Determine External & Internal Issues relevant to purpose & strategy, & affect Business Management System, BMS.**
▸ **Monitor & Review information about these issues.**
▸ **'Notes' define; can be; 'positive' & 'negative', & potential external, e.g. legal, & internal, e.g. culture, issues.**

2. Interested Parties - Standard 4.2

▸ **Determine: interested parties that are relevant to BMS.**
▸   **"   requirements of these parties that are relevant to BMS.**
▸ **Monitor & Review info about parties & relevant requirements**

3. Scope - Standard 4.3

▸ **Determine boundaries & Applicability of BMS to establish.**
▸ **Consider Issues & Interested Parties, & Products & Services.**
▸ **Apply all requirements that are applicable.**
▸ **Maintain as Documented Information 'DI'.**

{For full details, see ISO 9001:2015 Standard, which is a © controlled document.}

<> i. 🔍 Guidance

So the standard is asking the company to put itself in perspective, taking into account all the environments that it is working in / under. This includes all issues that are, or could, impact the business, and Interested Parties and what they are wanting the company to do, whether formally documented or not. After all of this has been undertaken, in an effective & efficient way, see 'Actions' on next page, the 'Scope' & 'BMS' can then be developed.
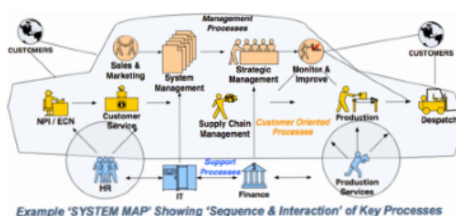
<> ii. 🕐 Actions - *Context Matrix*
"10-Point Plan"

i. FORM A SMALL CROSS FUNCTIONAL TEAM, WITH KNOWLEDGE REQUIRED.

↓

ii. BRAINSTORM INTERESTED PARTIES IP e.g. **> Spreadsheet or Post-its/FC** *1*

↓

iii. DETERMINE IF THEY ARE RELEVANT to the QMS & Which Process? *2*

↓

iv. BRAINSTORM REQUIREMENTS e.g.**> Spreadsheet S/S /Post-its next > IPs** *3*

↓

v. *MONITOR HOW?; 'REVIEW', 'RECORD INFORMATION'* INITIAL/ONGOING *4*

↓

vi. BRAINSTORM; EXTERNAL ISSUES e.g. **Spreadsheet or Post-its/Flip chart** *5*

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vii. BRAINSTORM; INTERNAL ISSUES S/S or Post-its/Flip chart *5*

↓

viii. IDENTIFY & FILL; GAPS / LINKS BETWEEN ALL OF ABOVE e.g. S/S / FC.

↓

ix COLLATE > MATRIX; i. IDENTIFY 'KPIs' to measure progress *6*

↓

x. Add *RISK & OPPORTUNITIES to MATRIX* & reference actions required *7*

↓

Then **DEVELOP 'SCOPE' of Business Management System, & actual 'BMS'**

CONTEXT MATRIX ; Post-Its / Spreadsheet

1. (4.2) Interested Parties; Int. & Ext.	*2.* (4.2) Relevant? (4.4) Process?	*3.* (4.2) Require-ment e.g. CSR?	*4.* (4.2) Monitor & Review?	*5.* (4.1) External/ Internal Issues; …	*6.* (4.4) KPIs?	*7.* (6.1) Risks, Actions. Effective ?
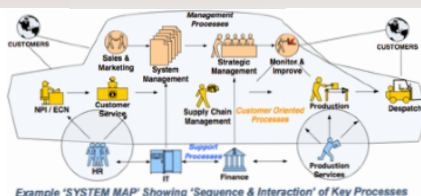
4. Process Approach 4.4
<> A. 📘 The requirements; Standard

"Establish, implement, maintain & continually   **4.4.1**
improve a Business Management System, BMS,
including the processes needed & their interactions.

Determine: processes needed throughout company;

a) " the inputs required & outputs expected;

b) " the sequence & interaction of these processes;

c) " & apply criteria / methods to ensure effective;

d) " resources needed & ensure availability;

e) assign responsibilities & authorities.

f) address risks & opportunities as determined;

g) evaluate & implement changes to achieve results;

h) improve the processes & the BMS

To the extent necessary, the organization shall: **4.4.2**
a) maintain documented information DI to support
   operation.

b) retain DI > confidence processes carried out
   as planned"

{For full details, see ISO 9001 & IATF 16949 Standards, which are a © controlled.}

Example 'SYSTEM MAP' Showing 'Sequence & Interaction' of Key Processes

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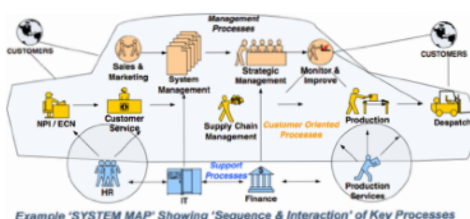
The process Approach -
<> B. 🔍 Guidance - What does it mean?

4.4.1 What do you do in your business? What are the key activities that will affect performance?

a. What comes into each process, and what do you want to go out?

b. How do these key processes interact with each other? Which other processes do they support?
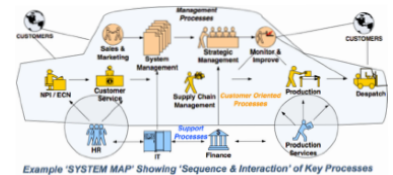

Example 'SYSTEM MAP' Showing 'Sequence & Interaction' of Key Processes

c. How are you going to define / document what you do, e.g. in Process Maps?

d. What do you need to operate effectively, resources; people, facilities, …?
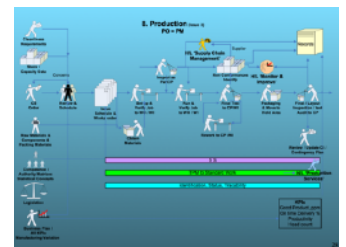
e. Who are the best people / job roles to undertake each task? This will aid identification of competence.

f. What is unknown, is it positive or negative? Plan for & manage these 'risks' effectively.

g. Implement a monitoring system with measures to ensure achieve targets, Corrective Action.
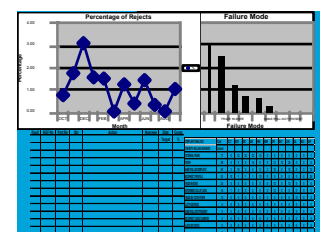
h. Implement a monitoring system with measures to improve, Continuous Improvement.

Example 'SYSTEM MAP' Showing 'Sequence & Interaction' of Key Processes

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The process Approach -
<> C. 🕐 The tasks - What to do?
"8-Point Plan"

i. IDENTIFY & LIST YOUR KEY PROCESSES

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ii. PRODUCE YOUR LEVEL 1 'SYSTEM MAP'. (Ref Page 6.)

Example 'SYSTEM MAP' Showing 'Sequence & Interaction' of Key Processes
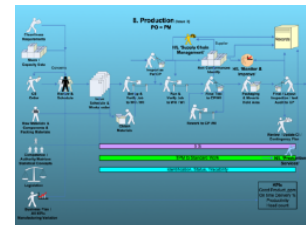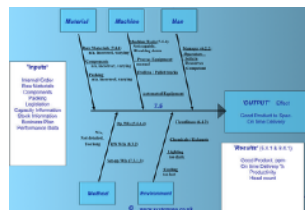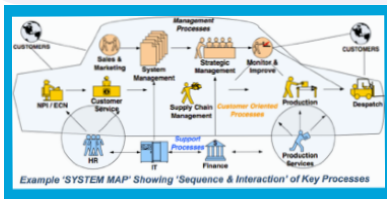
iii. ANALYSE THE RISKS IN WHAT YOU DO. e.g. Cause & Effect Diagram
PRODUCE LEVEL 2 'PROCESS MAPS', Inputs & Outputs. (Ref Page 6.)

↓

iv. PUT IN PLACE RESOURCE & INFORMATION SYSTEMS
FOR EACH OF YOUR PROCESSES.

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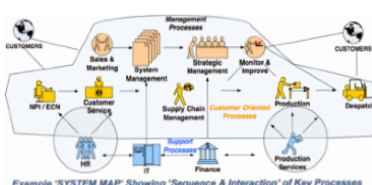**v. DEFINE WHO IS GOING TO DO WHAT ACTIVITY.**

↓

vi. IDENTIFY GAP / ANALYSIS OF UNCERTAINTY & TAKE ACTION.

↓

vii. USE A VISUAL FORMAT FOR KEY PERFORMANCE INDICATORS.
TAKE CORRECTIVE ACTION WHERE NOT ACHIEVING TARGET *

↓

viii. DRIVE CONTINUOUS IMPROVEMENT, ONGOING. * (Ref Page 7.)

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Example 'SYSTEM MAP' Showing 'Sequence & Interaction' of Key Processes

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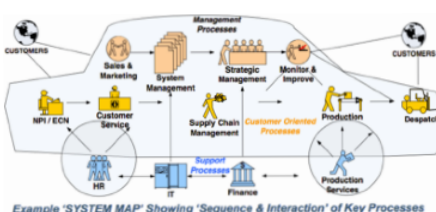
5. Example Documents i
<> a. 🔔 System Map
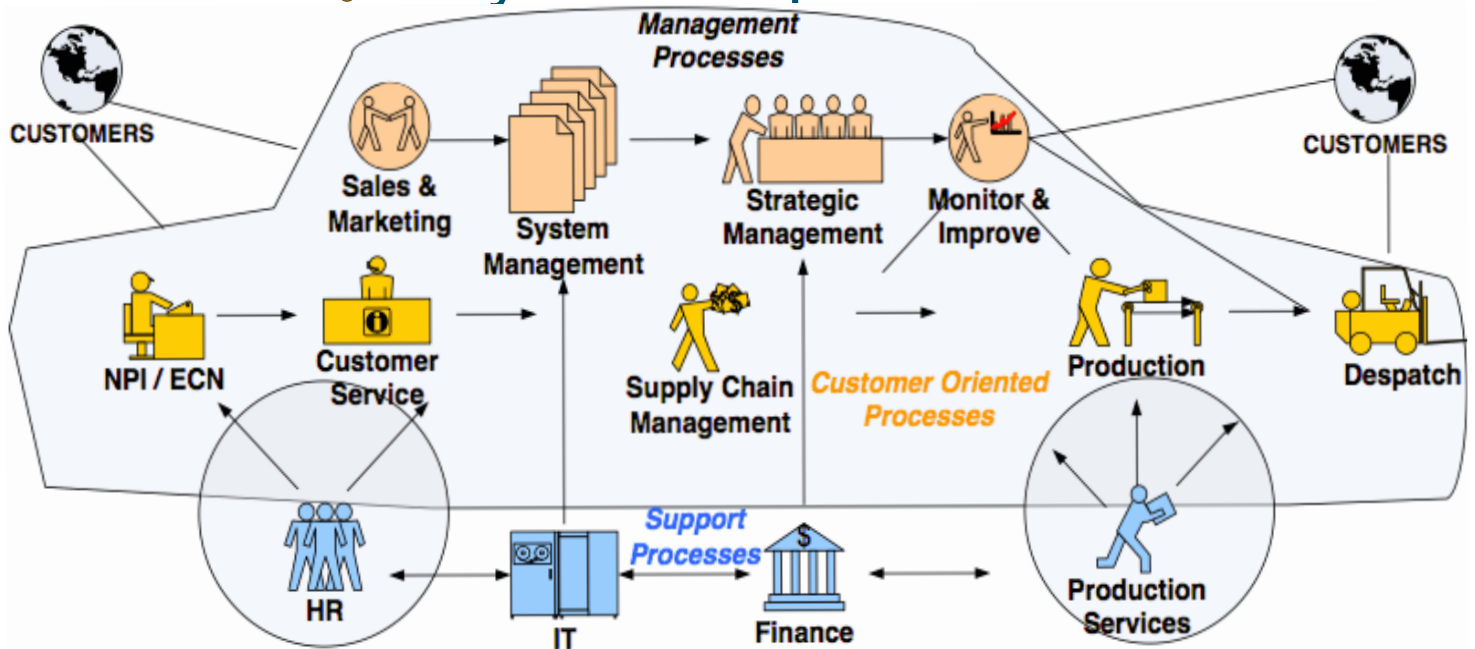
<> b. 🔔 Process Map

New Product Introduction & Engineering Changes Process Map. PO NPI Manager. Issue 3.

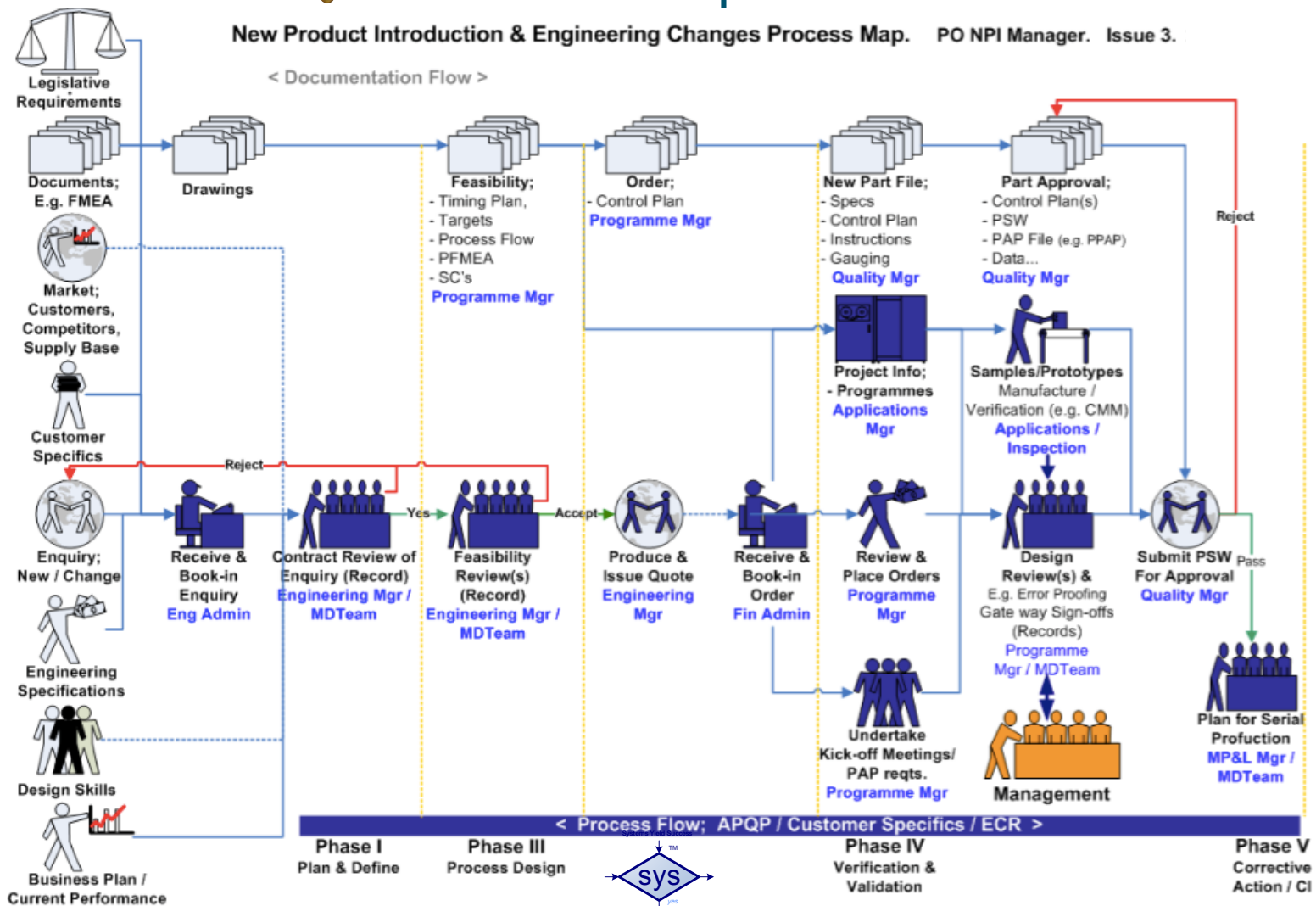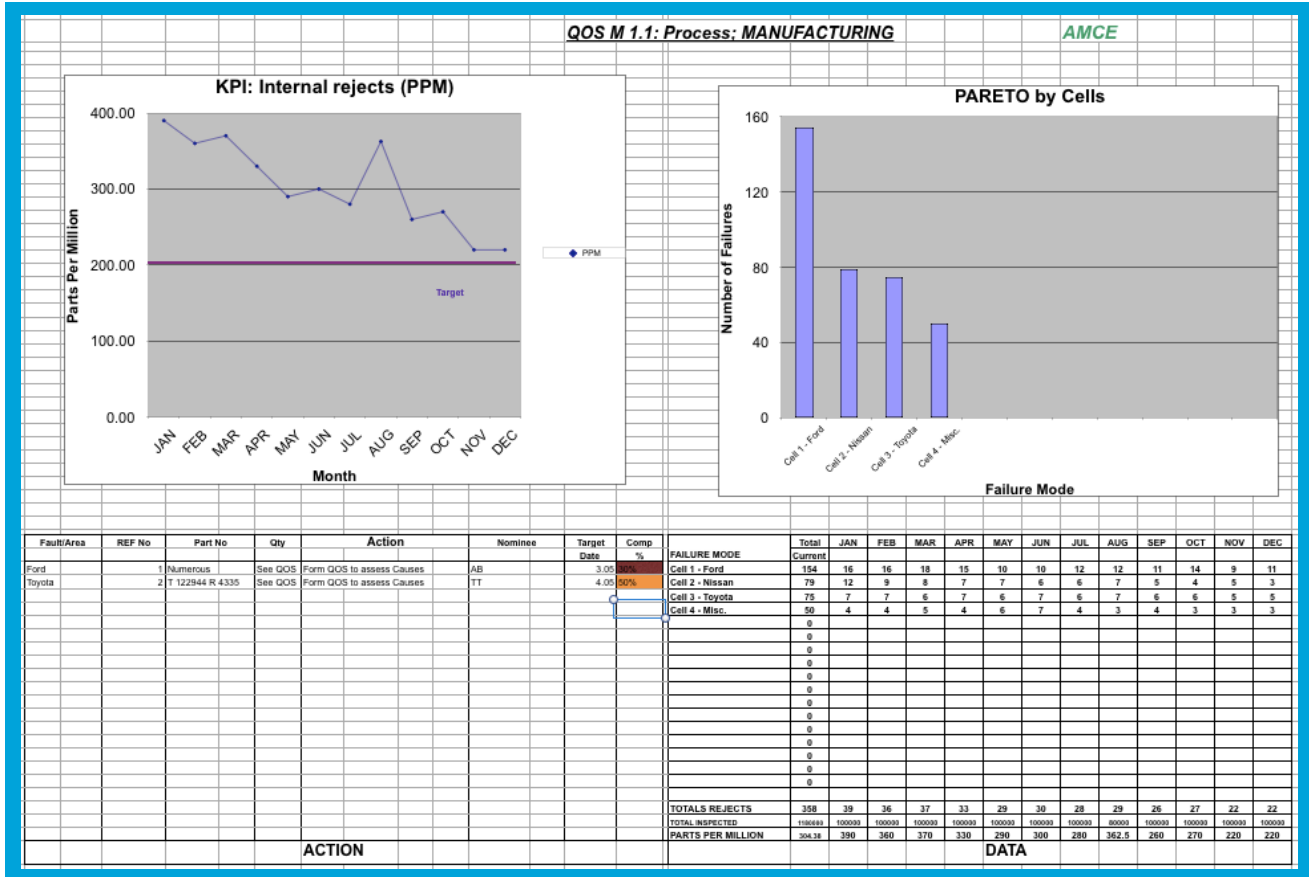| Fault/Area	REF No	Part No	Qty	Action	Nominee	Target Date	Comp %
Ford	1	Numerous	See QOS	Form QOS to assess Causes	AB	3.05	50%
Toyota	2	T 122944 R 4335	See QOS	Form QOS to assess Causes	TT	4.05	50%

ACTION

FAILURE MODE	Total Current	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Cell 1 - Ford	154	16	16	18	15	10	10	12	12	11	14	9	11
Cell 2 - Nissan	79	12	9	8	7	7	6	6	7	5	4	5	3
Cell 3 - Toyota	75	7	7	6	7	6	7	6	7	6	6	5	5
Cell 4 - Misc.	50	4	4	5	4	6	7	4	3	4	3	3	3
	0												
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TOTALS REJECTS	358	39	36	37	33	29	30	28	29	26	27	22	22
TOTAL INSPECTED	1180000	100000	100000	100000	100000	100000	100000	100000	80000	100000	100000	100000	100000
PARTS PER MILLION	304.38	390	360	370	330	290	300	280	362.5	260	270	220	220

DATA

<> c. ii 📈 Performance Graphs, Level II 'QOS'

Typically, the worst concern, Pareto graph, in the 'level I' QOS is then used to create a 'level II' QOS, to drill-down to get to the key causes of concern, to aid/ allow them to be tackled.

Contact
*If there is anything that we can do to support you, then do let us know for example via the **contact us** page of the website; www.systemsys.co.uk.*

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e-mail: alan@systemsys.co.uk,   Tel: 07947676705