

**Profile comparison mifare 4K Scotland, Lasseo and my preferred option**

**Lasseo option E**

Sector 0	Sector 16	Sector 32	Sector 36
Sector 1	Sector 17		
Sector 2	Sector 18		
Sector 3	Sector 19		
Sector 4	Sector 20	Sector 33	Sector 37
Sector 5	Sector 21		
Sector 6	Sector 22		
Sector 7	Sector 23		
Sector 8	Sector 24	Sector 34	Sector 38
Sector 9	Sector 25		
Sector 10	Sector 26		
Sector 11	Sector 27		
Sector 12	Sector 28	Sector 35	Sector 39
Sector 13	Sector 29		
Sector 14	Sector 30		
Sector 15	Sector 31		

**CJS preferred**

Sector 0	Sector 16	Sector 32	Sector 36
Sector 1	Sector 17		
Sector 2	Sector 18		
Sector 3	Sector 19		
Sector 4	Sector 20	Sector 33	Sector 37
Sector 5	Sector 21		
Sector 6	Sector 22		
Sector 7	Sector 23		
Sector 8	Sector 24	Sector 34	Sector 38
Sector 9	Sector 25		
Sector 10	Sector 26		
Sector 11	Sector 27		
Sector 12	Sector 28	Sector 35	Sector 39
Sector 13	Sector 29		
Sector 14	Sector 30		
Sector 15	Sector 31		

**Scotland**

Sector 0	Sector 16	Sector 32	Sector 36
Sector 1	Sector 17		
Sector 2	Sector 18		
Sector 3	Sector 19		
Sector 4	Sector 20	Sector 33	Sector 37
Sector 5	Sector 21		
Sector 6	Sector 22		
Sector 7	Sector 23		
Sector 8	Sector 24	Sector 34	Sector 38
Sector 9	Sector 25		
Sector 10	Sector 26		
Sector 11	Sector 27		
Sector 12	Sector 28	Sector 35	Sector 39
Sector 13	Sector 29		
Sector 14	Sector 30		
Sector 15	Sector 31		

Key

Lasseo
ITSO
Scotland
Must be assigned to ITSO for the ITSO Shell Sector 16 and ITSO Directory Sector 39

There is no difference in memory area assigned to lasseo or ITSO between Lasseo Option E and CJS preferred  
 Any of Lasseo options A,B,C or E will Work with ITSO I have chosen E as the most equitable comparison in terms of memory sharing  
 I suspect the Lasseo directory could easily point to sectors 33 and 37 instead of 34 and 35

CJS preferred is better for ITSO and as reflected in Scotland use one of Sectors 34 or 35 which are definid as "start sectors" for ITSO logs  
 Improves the efficiency of addressing log entries and uses one ITSO sector less

In either case the ENCTS card bureau should ensure that all the red Sector contain a transport key known to ITSO  
 whereas the green Sectors contain a normal live Diversified ITSO keys  
 I would suggest that the transport Key is chosen by ITSO and constant for all Red sectors on a single card but diversified by ISRN for each card.  
 After loading the transport key Red Sectors shall be left open for key changing by the ultimate user