भारत सरकार/**GOVERNMENT OF INDIA**
रेल मंत्रालय/**MINISTRY OF RAILWAYS**

(RAILWAY BOARD)

No.2021/TT-I/76/FOIS/4   Dated:-24.02.2022

The General Managers,
All Zonal Railways/Pus/CORE/NAIR,
(As per Standard mail list)

Sub:- Joint Procedure Order(JPO) for FMM FOIS Integration.

　　　　There is an urgent need for adoption of proper procedure for one time purification and integration of FMM and FOIS wagon database.

　　　　The matter has been examined by Traffic Transportation & Mechanical Directorates of Railway Board and accordingly, Joint Procedure Order (JPO) on one time purification and integration of FMM and FOIS wagon databases is attached for implementation.
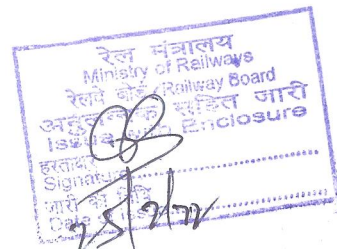
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24|02|2022
(J. S. Sehrawat)
Dy. Director/Traffic Transp.-1
Railway Board

Copy to:
1. DG/RDSO, MD/CRIS, CAO/FOIS.
2. AM/T, PED/TTM, EDME/Freight, ED/C&IS, EDTC/R and EDFM
　　Railway Board

O/C

भारत सरकार/GOVERNMENT OF INDIA
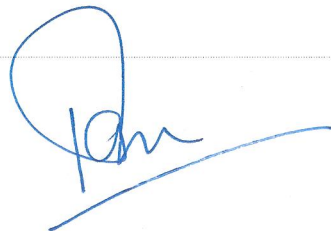रेल मंत्रालय/MINISTRY OF RAILWAYS
(रेलवे बोर्ड/RAILWAY BOARD)
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No.2021/TT-I/76/FOIS/4. New Delhi, Dated:23.02.2022

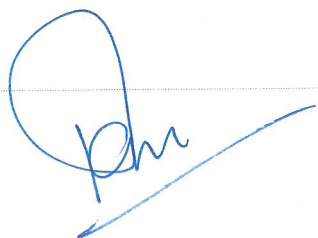## JOINT PROCEDURE ORDER(JPO) FOR FMM FOIS INTEGRATION

A. Procedure for One time purification and integration of FMM and FOIS wagon databases : The following stepwise procedure shall be followed for creation of a unified master database of wagon holding over IR:

1. **Matching of FMM and FOIS attributes**: It is understood that the fields available on the two databases do not presently match. In order to attain a common master database - an exercise will be undertaken to create and populate the additional fields (required in FOIS), in the FMM database.

2. FMM shall act as Data Steward (i.e. source of all wagon data) for creation, updation and deletion of entire IR Wagon Fleet including all privately owned, Leased and Defence Wagons.

3. FMM shall synchronize the Wagon data with IR Master Database Management System (MDM) to create a Pure Wagon Master **(PWM)**. FOIS Application shall subscribe to PWM and any update in PWM shall be received in FOIS. FOIS shall record all such wagons and further use same in FOIS. FOIS Zonal Railway user shall also update additional commercial fields (required in FOIS) in MDM.

4. FMM shall carry out a logical mapping of FOIS Wagon master with the IR Pure Wagon Master available with FMM. This shall be shared by FMM with FOIS as a mapping table **(MT).**

5. **One to one replacement of wagons in FOIS database in empty condition during maintenance cycle as per TXR inputs**:

   i. Rake will be offered by the FOIS user to FMM user for TXR examination along with wagon details as per FOIS. Herein, FOIS, with the help of MT, will replace any incorrect wagon in Rake Consist with corresponding correct wagon as has been suggested by FMM and made available through MT. Same shall be done taking into account various validations in FOIS to maintain data consistency.

   ii. On receiving FOIS Offered Rakes, FMM user shall carry out physical census of the Rake and record actual wagon Numbers for the offered Rake.

   iii. FMM user of the TXR point shall match the wagon numbers of FOIS offered Rake and provide actual wagon numbers to the extent feasible against FOIS offered wagons. Same shall be published from FMM to FOIS for correction
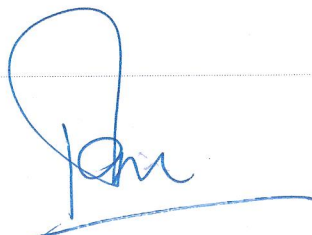
iv. On receipt of corrected wagon details for FOIS offered wagons, FOIS shall again replace the FOIS Wagon with FMM user suggested wagon details to the extent possible.

v. FOIS user shall report release of the rake from TXR examination. Here, the BPC number shall be kept blank. The FOIS user shall attach the locomotive and wait for BPC to be received from FMM. The rake cannot be departed in FOIS without BPC. In case of any communication failure between FOIS and FMM or any other reason for non-receipt of BPC from FMM, the FOIS user shall feed BPC number as received manually from TXR staff in FOIS. Post issue of BPC for a Rake through FMM Depot Application (including change in wagon consist), FMM shall handover the BPC particulars and Final Wagon Consist for the Rake to FOIS. This shall update BPC Number for the said Rake in FOIS. In case FMM issued BPC is received in FOIS post departure of Rake from Examination Depot, FOIS shall update the manually entered BPC No with System issued BPC Number. However, same should not be delayed beyond two hours after departure of the rake.

vi. Due to attachment/detachment on account of defective wagons, there may be difference between the wagon consist of the rake as in FOIS and as in the BPC provided by FMM. The wagon numbers of wagons so attached needs to be corrected. FOIS User will be provided window to view difference between FOIS Rake Wagon Consist and the consist as issued with BPC. FOIS User will be suggested to correct the FOIS Wagon Consist in accordance with consist as issued with the BPC. For correction of FOIS Rake consist, FOIS user, using the existing facility of Wagon detachment from Rake, shall detach wagons that are not part of the Consist as received with BPC. These wagons, if are physically available, shall be retained as-is in FOIS Yard holding. However, in case there are invalid wagons, same should be deleted from yard holding and replaced with correct 11 digit wagon numbers from PWM. Further, additional wagons, as notified as part of FMM issued BPC (if any), should be attached to the rake using existing Rake Attachment functionality of FOIS. After correction of wagons in FOIS to match the Rake Consist issued with BPC, FOIS user should perform any remaining pre-departure activities and proceed. Through this process, FOIS user shall attempt to correct as many wagons in Rake so as to match physical Rake Consist.

vii. Departure of Trains shall not be restricted in FOIS if BPC is not received from FMM in FOIS. However same shall have to be fed manually before departure.

viii. During this phase the FOIS user would be permitted to delete invalid wagons from Rake and Yard and add wagons to yard from PWM so as to replace invalid wagons with PWM validated wagons as and when required/observed. This will further assist the integration effort and purification of FOIS wagon master.

ix. Present facility of creation or condemnation of any wagon in FOIS shall be withdrawn from FOIS user. Since, FOIS shall be in sync with PWM available through MDM, FOIS user shall only be allowed to change location of Empty wagons though delete (cut-out) and cut-in feature.

x. Any change in FOIS wagon database shall only be carried out while wagon is in "empty" state in FOIS.

xi. The above exercise shall only be attempted on 'IR' owned wagon pool and not on privately owned, NMG or defence wagons.

xii. FOIS incorrect wagons, once updated through this process, shall not be corrected again through this process as they shall be tagged as pure wagons in FOIS requiring no further correction. In case required, additional process for such exceptional update may be created.

xiii. Replacement of wagons shall only be accepted in FOIS to the extent of maintaining integrity of the rake within the family of similar wagon types and allowed for the rake type.

xiv. **User Manual for FOIS Users including troubleshooting protocols**: A User Manual for FOIS and FMM Users covering normal processes as well as exceptional situations will be issued separately.

xv. **Monitoring :**Since the drive is being undertaken during the busy season, close monitoring is required to ensure not only the success of this crucial exercise but also to ensure that at field level the freight movement /loading/RR generation, etc remains unaffected by the exercise. Accordingly, the exercise will be closely monitored at divisional control and HQ controls through a system of Nodal officers and Supervisors from mechanical C&W and Operating /commercial officers (Sr.DOM & Sr.DME at divisional level and CFTM and CRSE/Frt at HQ level). The efforts will be overseen by EDME/Frt and ED/TT/F at Railway Board level with support from CRIS. CRIS will develop dashboards and web reports to enable the monitoring of progress of the integration effort at Divisional /HQ/Railway Board levels. Wagon related KPIs will also be closely monitored at the three levels and any sudden unusual variance in KPIs will be examined by Nodal officers/supervisors flagged to appropriate level required and corrective action taken as needed.

xvi. **Resolution of field issues:** CRIS will put in place a round the clock control comprising Support Staff for monitoring and assisting the field users. This will help sort out technical issues such as : cutting in of a wagon by goods clerk in case needed in exception for generation of RR and other such issues.

xvii. **Training and Capacity building**: The office of CAO/Systems, FOIS and FMM teams of CRIS will impart trainings to the field users (Operating and Mechanical) for effective rollout. Detailed operating instructions for implementation of the above functionalities will be issued to the field users. This would cover activities

as per roles including how the monitoring is to be done at supervisory/officer levels.

B. Wagon Purification:

1. Field users (FMM/WISE/FOIS) shall ensure that activities for placement, release of rakes for TXR examination are done in FMM/FOIS/WISE without any delay, not exceeding one hour from the actual time of activities in any case.

2. Wagon numbers will normally not be changed for merely the reason that it is not as per wagon numbering scheme introduced by IR in 2003, I.e. If a wagon number is unique number with eleven digits but-
   i. Its first 2 digits are not in compliance with its type,
   ii. Its 3rd and 4th digits are not in compliance with its owner,
   iii. Its 5th and 6th digits are not in compliance with its manufacturing year;
   then in above situations, wagon number will not be changed.

3. Wagons having non 11 digit numbers, incorrect check digits or suspected to be duplicate (same 11 digit number assigned to two different wagons), need to be sick marked by Freight examination points and detached.
   i. For such wagons, new number generation request to be raised by FMM/WISE user via IRWMS (option provided in FMM/WISE) to generate a new 11 digit number.
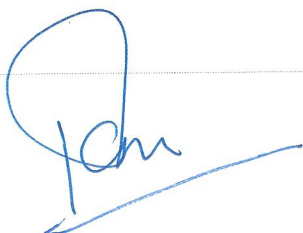   ii. New 11 digit number then received to be painted on the wagon.

   Any such change in wagon type/wagon number should be updated in PWM/MDM with immediate effect.

C. Wagon Census: After the integration drive, an all India Wagon census may be held if there is a need for the same.

D. Data Governance protocols : The aspect of modification of individual wagons resulting in change in wagon type, transfer of ownership, condemnation, new wagon induction (by any user) etc resulting in change in any of the common attributes will be carried out as per a set protocol to be issued separately by Railway Board to ensure sustained data purity. Strict security levels and joint ownership of the final joint master will be ensured after a cut off date.

E. Sustenance of Data integrity : After the one time integration, retaining the purity of integration even as data input is manual at several locations , will require a special effort and monitoring:
   i. While wagon census will provide annual purification, systems for checks on day to day operation including on creation of new wagons will be put in force. A protocol to this effect will be issued separately including role of commercial/C&W for feeding their part of attributes.
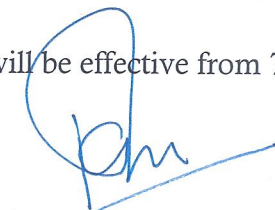
ii.   Systems are also required to be put in place to ensure that manual handing and taking over of BPC with the train crew is also integrated on the system. This may require a separate process flow involving the crew Management System where the possession of the BPC document is recorded on the system ledger along with its audit trail. The crew will verify the consist with the BPC handed over to him at the stage of sign on. CRIS will develop the Proof of Concept (POC) of the above functionality and send a proposal to Railway Board for necessary sanctions/approvals.

Moreover the RFID proliferation needs to be taken up on priority with provision of RFID readers with all users who deal with wagon consists vis TXR, Goods Clerk, Yard masters/TNCs.

F. The JPO will be effective from 7th March, 2022.

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