

GOVERNMENT OF INDIA
MINISTRY OF ELECTRONICS AND INFORMATION TECHNOLOGY
LOK SABHA
STARRED QUESTION NO. *362
TO BE ANSWERED ON 21.03.2018

DIGITAL PAYMENTS

***362 SHRI RAMDAS C TADAS:
SHRI RAJIV PRATAP RUDY:**

Will the Minister of Electronics and Information Technology be pleased to state:

- (a) whether there has been a noticeable increase in use of digital payments in the country since demonetization and if so, the details thereof along with the volume and percentage of digital transactions during the last five years, year-wise;
- (a) whether this growth meets the expectations of the Government and if not, the reasons therefore;
- (b) whether there has been a comparative study on the digital transactions carried across the world and if so, the details thereof, country-wise;
- (c) the steps taken by the Government for ensuring that digital transactions are safe and secure; and
- (d) the measures taken / being taken to incentivise digital transaction and promote digital economy/literacy, especially in rural regions of the country?

ANSWER

MINISTER FOR ELECTRONICS AND INFORMATION TECHNOLOGY
(SHRI RAVI SHANKAR PRASAD)

- (a) to (e): A Statement is laid on the Table of the House.

**STATEMENT REFERRED TO IN REPLY TO LOK SABHA STARRED
QUESTION NO.*362 FOR 21.03.2018 REGARDING DIGITAL PAYMENTS**

(a): Yes, Sir. There has been a noticeable increase in use of digital payments in the country since demonetization. This increase is visible in the growth seen in the number of daily transactions by various digital payment modes as given in the table below:

No. of Transactions per Day	8th November, 2016	8th February, 2018	Growth
UPI (BHIM & USSD)	3694(Actual)	58.54 lakh	158373%
Debit Card (RuPay)	3.85 lakh	22.39 lakh	482%
Immediate Payment System (IMPS)	13.94 lakh	37.49 lakh	169%
Aadhaar Enabled Payments System	9.94 lakh	33.75 lakh	240%

Data Source: NPCI

The details of Digital Payment transactions by volume and value for last five years using various digital payment modes (RTGS, EFT/NEFT, IMPS, Credit card / Debit card usage at POS, m-Wallet, PPI Cards, UPI, AEPS, NETC, BBPS, NACH) is placed at **Annexure-I**. The summary of the same is tabulated below :

Digital Transaction over the last five years

Year/Modes	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18*
Volume of Transactions (In Cr)	210.52	317.60	577.75	1012.58	1605.30
Value of Transactions (in Lakh Cr)	951.62	994.24	1128.71	1393.21	1462.6

* Data for 2017-18 is Till January, 2017-18 * Data obtained from RBI, Banks and PPI.

(b): The growth in digital payments by value and volume since demonetization is given at Annexure-II(a) &(b) respectively and it is phenomenal. This growth is largely to the satisfaction of Government.

(c): The Ratan P Watal Committee set up by the Ministry of Finance gave its report in November 2016 (available at http://finance.du.ac.in/du-finance/uploads/pdf/Reports/watal_report271216.pdf.) In the report cash to GDP ratio (as a proxy for digitalization) of certain countries has been brought out as given below:



Figure: Cash to GDP Ratio 2013

(d): RBI and CERT-In have been regularly issuing circulars and advisories to banks and all payment system providers to ensure the safety and security in digital payment transactions. The listing of such instructions issued by RBI & CERT-In are kept at **Annexure-III(a)&(b)** respectively.

(e): The Government has incentivized the usage of BHIM App for making digital transactions. With effect from 1.1.2018 MDR on debit card transactions of value upto Rs.2000 is to be reimbursed to the banks by the Government in order to bring such transactions on par with cash. Besides Ministries and departments such as Railways, Petroleum & Natural gas etc are offering incentives to promote digital payments. A list of such incentives is kept at **Annexure-IV**. Through the programme of **Pradhan Mantri Gramin Digital Saksharta Abhiyaan** (PMGDISHA) measures are afoot to train six crore persons in rural areas, across States/UTs in various aspects of digital literacy including digital financial literacy, covering one member from every eligible household in about 40% of rural households by 31st March, 2019. Besides there are 2,92,406 number of Community Service Centres (CSCs) of which 1,83,005 number are operating in rural area and these CSCs play crucial role in enabling and facilitating digital transactions.

Mode-wise digital payment transaction data for last 5 years

Year/Modes	FY 2013-14		FY 2014-15		FY 2015-16		FY 2016-17		FY 2017-18*	
Units	Vol (In Cr)	Val (in Lakh Cr)	Vol (In Cr)	Val (in Lakh Cr)	Vol (In Cr)	Val (in Lakh Cr)	Vol (In Cr)	Val (in Lakh Cr)	Vol (In Cr)	Val (in Lakh Cr)
RTGS	8.11	904.97	9.28	929.33	9.83	1035.5 5	10.79	1253.65	10.11	1194.5 3
EFT/NEFT	66.10	43.79	92.75	59.80	125.2 9	83.27	162.21	120.04	156.88	134.84
IMPS	1.54	0.10	7.84	0.58	22.08	1.62	50.67	4.11	80.04	7.00
Credit card usage at POS	50.91	1.54	61.51	1.90	78.57	2.41	108.71	3.28	116.31	3.77
Debit card usage at POS	61.91	0.95	80.81	1.21	117.3 6	1.59	239.93	3.30	271.40	3.78
m-Wallet	10.75	0.03	25.50	0.08	60.40	0.21	163.00	0.53	244.72	0.85
PPI Cards	2.56	0.03	5.89	0.11	14.35	0.25	33.31	0.28	37.25	0.28
NACH	8.65	0.21	34.02	1.22	140.4 1	3.80	205.73	7.92	207.60	8.48
Ape's	-	-	-	-	9.47	0.00	34.45	0.02	78.29	0.19
BHIM UPI/USSD	-	-	-	-	-	-	1.75	0.07	56.58	0.67
NETC	-	-	-	-	-	-	2.03	0.01	9.78	0.03
BBPS	-	-	-	-	-	-	0.01	0.00	1.38	0.01
Internet Banking	-	-	-	-	-	-	-	-	113.96	89.56
Mobile Banking	-	-	-	-	-	-	-	-	48.55	2.09
Others	-	-	-	-	-	-	-	-	66.46	16.48
Closed Loop	-	-	-	-	-	-	-	-	105.99	0.02
Transactions	210.52	951.62	317.6 0	994.24	577.7 5	1128.7 1	1012.5 8	1393.21	1605.3 0	1462.5 8

Data for 2017-18 is Till January, 2017-18

* Data obtained from RBI, Banks and PPI * “-“ data not available

Annexure-II(a)

The month-on-month growth of various Digital Payment modes since demonetization is as below-

Digital Payment Volume (In Crores)

Mode of Digital Payment	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18
RTGS	0.8	0.9	0.9	0.9	1.3	1	1	1	0.9	0.9	1	1	1.1	1.1	1.1
EFT/NEFT	12	17	16	15	19	14	16	15	15	15	16	16	16	17	17
IMPS	4	5	6	6	7	7	7	7	7	8	8	9	9	10	10
Credit Card at PoS	10	12	11	9	11	11	12	11	11	12	11	12	12	12	13
Debit Usage at PoS	24	42	33	25	27	27	26	25	26	27	27	28	27	29	30
m-Wallet	14	21	26	25	31	32	24	22	24	23	20	20	19	29	33
PPI Cards	3	5	3	3	3	3	4	3	3	4	4	4	5	3	3
Mobile Banking	9	11	11	10	11	11	11	12	10	10	11	15	18	25	27
UPI(Incl. BHIM/USSD)	0	0.2	0.4	0.4	0.6	0.7	0.9	1	1.2	1.7	3.1	7.7	10.5	14.6	15.2
NACH	16	21	17	16	19	22	20	21	21	21	19	20	21	20	22
AEPS Total	3	4	4	4	5	6	7	8	8	8	8	8	8	9	9
BBPS	0	0.3	0	0	0	0	0	0	0	0.1	0.2	0.2	0.2	0.3	0.4
NETC	-	0	0.6	0.7	0.8	0.7	0.8	0.8	0.9	1	1	1	1.1	1.2	1.3
Total	95	138	130	115	136	134	129	127	128	130	129	142	148	171	182

From nearly 94 crore Digital Transaction in Nov-16 to approximately 182 Crore transactions in Jan-18, there has been a nearly 93% growth in volume of Digital Payments.

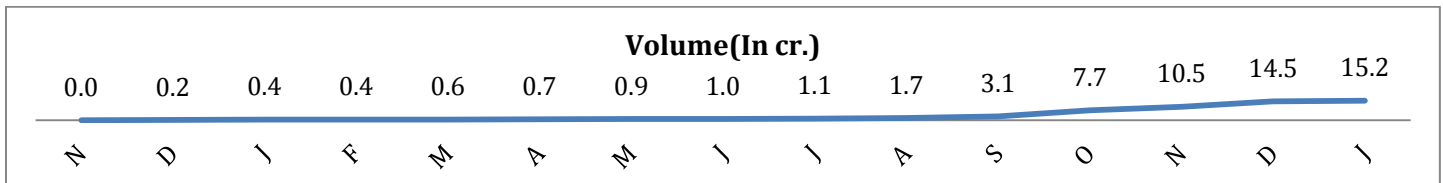
Annexure-II(b)**Digital Payment Value (In Rs. thousand Crores)**

Mode of Digital Payment	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18
RTGS	10,189	11,098	10,060	9,527	15,409	11,174	11,331	11,620	11,056	11,383	12,773	11,581	12,358	12,810	13,367
EFT/NEFT	881	1,154	1,136	1,088	1,629	1,216	1,241	1,269	1,201	1,250	1,418	1,385	1,388	1,578	1,537
IMPS	32	43	49	48	56	56	59	60	60	65	72	75	78	87	88
Credit Card at PoS	27	31	33	29	33	33	36	35	34	36	37	42	39	42	41
Debit Usage at PoS	32	58	49	36	36	37	37	38	35	35	37	41	37	41	41
m-Wallet	3.3	7.4	8.4	6.9	7.3	7.4	7.2	5.3	6.9	7.3	8.2	8.7	9.4	12.6	12.6
PPI Cards	1.5	2.1	2.4	2.5	3.1	2.7	3.3	3	2.7	2.9	2.6	2.9	3.8	1.6	2.1
Mobile Banking	137	150	138	128	173	161	213	181	81	81	86	92	105	112	122
UPI(Incl. BHIM/USSD)	0.1	0.7	1.7	1.9	2.4	2.3	2.8	3.1	3.4	4.2	5.3	7.1	9.7	13.2	15.6
NACH	68	70	60	65	90	97	76	81	84	82	71	99	94	81	82
AEPS Total	0.1	0.2	0.3	0.4	0.6	0.8	1.2	1.3	1.4	1.7	2	2.5	2.6	2.6	3.3
BBPS	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	0.1	0.2	0.2
NETC	-	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3
Total	11,371	12,614	11,538	10,933	17,441	12,789	13,008	13,297	12,567	12,949	14,513	13,335	14,126	14,780	15,313

The corresponding numbers for BHIM/ UPI are as follows-

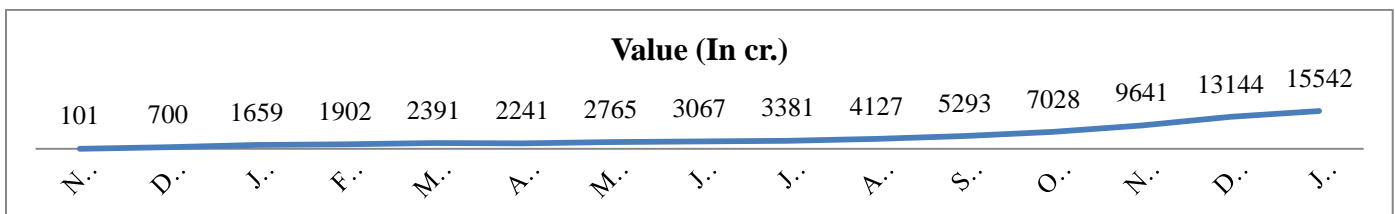
BHIM/UPI volume month on month in Cr.

Mode of Digital Payment	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18
BHIM/ UPI	0.0	0.2	0.4	0.4	0.6	0.7	0.9	1.0	1.1	1.7	3.1	7.7	10.5	14.5	15.2



BHIM/UPI value month on month in Cr

Mode of Digital Payment	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18
BHIM/ UPI	101	700	1659	1902	2391	2241	2765	3067	3381	4127	5293	7028	9641	13144	15542



Guidelines & Circulars issued by RBI

Reserve Bank of India (RBI) issues the regulations related to cyber security guidelines and periodically reviews the cyber security developments and threats on an ongoing basis and necessary measures are taken to strengthen the cyber resilience of banks. Reserve Bank of India (RBI) is taking adequate measures for **Risk Mitigation for Online Payments**.

Some of the measures taken by RBI are as follows-

1. A comprehensive circular on Cyber Security Framework in Banks issued on June 2, 2016 (DBS.CO/CSITE/BC.11/33.01.001/2015-16) covers best practices pertaining to various aspects of cyber security
1. RBI has also set up a Cyber Crisis Management Group to address any major incidents reported including suggesting ways to respond. Based on market intelligence and incidents reported by the banks, advisories are issued to the banks for sensitizing them about various threats and ensure prompt preventive/corrective action.
2. Department of Banking Supervision under RBI, with the help of Indian – Computer Emergency Response Team (CERT-In), conducts cyber security preparedness testing among banks on the basis of hypothetical scenarios.
3. RBI issues Circulars/advisories to all Commercial Banks on phishing attacks and preventive / detective measures to tackle phishing attacks. Banks have also been following the same with their users.
4. RBI has set up a Cyber Security and IT Examination (CSITE) cell in 2015 and carries out Information Technology (IT) Examination of banks separately from the regular financial examination of the banks to assess their cyber resilience. The examination, inter-alia, evaluates the processes implemented by banks for security checks like Vulnerability Assessment (VA) / Penetration Testing (PT) etc. and their follow up action.
5. An inter-disciplinary Standing Committee on Cyber Security at RBI, reviews the threats inherent in the existing/emerging technology and suggests appropriate policy interventions to strengthen cyber security and resilience.
6. RBI has set up an Information Technology (IT) Subsidiary, which would focus, among other things, on cyber security within RBI as well as in regulated entities.
7. Banks and Payment System Operators have been advised to enhance the security and risk mitigation measures for (a) card transactions (includes card based online transactions) and (b) electronic payment transactions (includes e-banking transactions) by taking following measures:
 - a) Banks have been advised to provide **online alerts** for all card transactions (card present and card not present), vide, RBI circular dated February 18, 2009 (RBI / DPSS No. 1501 / 02.14.003 / 2008-2009) and March 29, 2011 (DPSS. CO. PD 2224 /02.14.003/2010-2011).
 - b) Banks have been advised, vide, circular February 18, 2009 (RBI / DPSS No. 1501 / 02.14.003 / 2008-2009) and December 31, 2010 (DPSS.CO.No.1503/02.14.003/2010-2011) to put in place a system of providing **additional factor of authentication** (2FA) for all card not present transactions using the information which is not available on the card.
 - c) Banks have also been advised vide circulars dated February 28, 2013 (DPSS (CO) PD No.1462 / 02.14.003 / 2012-13) and June 24, 2013 (DPSS (CO) PD No.2377 / 02.14.003 / 2012-13) for securing electronic (online and e-banking) transactions, to introduce **additional security measures**.
8. For Non-Bank Entities operating Payment Systems in India, in order to ensure that the technology deployed to operate the payment system/s authorised is/are being operated in a safe, secure, sound and efficient manner, RBI has, vide circulars DPSS.AD.No.1206 / 02.27.005 / 2009-2010 dated December 7, 2009 and DPSS.1444/ 06.11.001/ 2010-2011 dated December 27, 2010, which was subsequently amended vide circular DPSS.CO.OSD.No.2374 / 06.11.001 / 2010-2011 dated April 15, 2011 (copy is available on

https://www.rbi.org.in/scripts/FS_Notification.aspx?Id=6344&fn=9&Mode=0), mandated System Audit to be done on an annual basis by Certified Information Systems Auditor (CISA), registered with Information Systems Audit and Control Association (ISACA) or by a holder of a Diploma in Information System Audit (DISA) qualification of the Institute of Chartered Accountants of India (ICAI).

9. With a view to address the issue of cyber resilience, RBI had, vide circular DPSS.CO.OSD.No.1485/06.08.005/2016-17 dated December 9, 2016 (copy is available on https://www.rbi.org.in/scripts/FS_Notification.aspx?Id=10772&fn=9&Mode=0), instructed all authorised entities/ banks issuing PPIs in the country to carry out special audit by empanelled CERT-In auditors and take appropriate measures on mitigating phishing attacks.
In addition, details of direction pertaining to security for PPI transactions, are available in section 'Security, Fraud prevention and Risk Management Framework' of the Master Directions for PPI issued by RBI (DPSS.CO.PD.No.1164/02.14.006/2017-18).
10. Limited Liability of Customers: Guidelines on Limited liability of customers in Unauthorized Electronic Banking Transactions (RBI Circular Number DBR.No.Leg. BC.78/09.07.005/ 2017 -18 dated 06.07.2016) are available at the RBI website link: <https://rbidocs.rbi.org.in/rdocs/notification/PDFs/NOTI15D620D2C4D2CA4A33AABC928CA6204B19.PDF>
11. RBI has issued various circulars wherein customer banks are advised to educate customers. These circulars are as follows:
 - a) Card Payments – Relaxation in requirement of Additional Factor of Authentication for small value card present transactions dated May 14, 2015 (DPSS.CO.PD.No.2163/02.14.003/2014-2015).
 - b) Cash Withdrawal at Point-of-Sale (POS) - Enhanced limit at Tier III to VI Centres dated August 27, 2015 (DPSS.CO.PD.No.449/02.14.003/2015-16).
 - c) Card Not Present transactions –Relaxation in Additional Factor of Authentication for payments upto 2000/- for card network provided authentication solutions dated December 6, 2016 (DPSS.CO.PD.No.1431/02.14.003/2016-17).
 - d) Master Direction on Issuance & Operation of Prepaid Payment Instruments dated October 11, 2017 (DPSS.CO.PD.No.1164/02.14.006/2017-18).
 - e) Banks have also been requested to educate customers about cyber security risks, as per the circular on Cyber Security Framework in Banks dated June 2, 2016 (DBS.CO/CSITE/BC.11/33.01.001/2015-16).

Annexure-III(b)

Steps taken by CERT-In to ensure safe and secure digital transactions

In addition, steps taken by Government to secure digital payment system are as under:

1. Government has formulated Cyber Crisis Management Plan for countering cyber-attacks for implementation by all Ministries/ Departments of Central Government, State Governments and their organizations and critical sectors.
2. CERT-In issues alerts and advisories regarding latest cyber threats/vulnerabilities along with countermeasures to create awareness among stakeholders to take appropriate measures to ensure safe usage of digital technologies. Regarding securing digital payments, 27 advisories have been issued for users and institutions.
3. CERT-In has empanelled 67 security auditing organizations to support and audit implementation of Information Security Best Practices.
4. All organizations providing digital payment services have been mandated to report cyber security incidents to CERT-In expeditiously.
5. Cyber security mock drills are being conducted regularly to enable assessment of cyber security posture and preparedness of organizations in Government and critical sectors. 25 such exercises have so far been conducted by CERT-In where organisations from different States and sectors such as Finance, Defence, Power, Telecom, Transport, Energy, Space, IT/ITeS, etc. participated.
6. Cyber security awareness sessions are conducted by Ministry of Electronics and Information technology (MeitY) under the Digishala Awareness Campaign.

7. Government has established Botnet Cleaning and Malware Analysis Centre to detect and clean infected systems in the country. The project is initiated in coordination with the Internet Service Providers and Industry.
8. MeitY has organised 2 workshops for banks, Internet Service Providers (ISPs) and Prepaid Payment Instruments (PPIs) issuing entities regarding security of digital payments systems.
9. Government has issued general guidelines for Chief Information Security Officers (CISOs) for securing applications and infrastructure and their key roles and responsibilities for compliance; and is regularly conducting cyber security trainings for CISOs of Government and critical sector organisations, in addition to Information Technology (IT) / cyber security professionals, to give an exposure on current threat landscape and countermeasures.

Annexure-IV

Measures taken/being taken to incentivize digital transactions and promote digital economy/literacy, especially in rural regions of the country

The incentives being offered by Ministries / Departments including MeitY are as below:

I. Ministry of Electronics and Information Technology (MeitY)

i) On 14th April 2017, Government of India introduced the following promotional schemes to encourage the usage of digital payments (through BHIM and *99#) at the grass root level.

a) BHIM (Bharat Interface for Money) Referral Bonus Scheme for Individuals

This scheme is to incentivize an existing users of BHIM to bring new users on the BHIM platform. The bonus will be paid to both the referrer and the new user of BHIM (referee). The referral will be considered successful on completion of minimum 3 unique successful financial transactions totaling to Rs 50 (to the valid UPI user – “valid receiver”) performed by the referee.

b) BHIM (Bharat Interface for Money) Cashback Scheme for Merchants

The scheme is to incentivize users for receiving payments on BHIM App or *99# from their customers. The merchant will receive cash back on completion of minimum 50 credit transactions of which at least 20 transactions is from valid UPI unique customers including that of BHIM users

c) BHIM Aadhaar Merchant Incentive Scheme

The scheme aims to incentivize not just one-time adoption of BHIM Aadhaar by merchants, but should also increase the ease of transactions for all citizens as it uses the means of Aadhaar for digital transactions. The objective of the scheme are twofold, viz:

- Increase in number of merchants registered on BHIM Aadhaar
- Increase in number of payment transactions using BHIM Aadhaar

ii) MeitY issued a Gazette Notification dated 28th December 2017 regarding reimbursement of MDR charges on Debit Cards/BHIM UPI/AePS transactions of value less than or equal to Rs. 2000.00 to promote digital transactions.

Additionally, MeitY has requested all other Ministries/Departments to start incentivizing digital payments by offering visible discount on digital payment vis-à-vis cash.

II. Ministry of Road Transport and Highways (MoRTH)

MoRTH is offering incentive of 7.5% to toll road users on electronically paid fee for the FY 2017-18. 5% for 2018-19 and 2.5% in 2019-20.

III. Ministry of Railways

- i. Provision of 5% discount in online payment of booking of Retiring Room etc.
- ii. Withdrawal of service charge of Rs. 30 applicable against Credit and Debit cards for purchasing journey tickets at UTS and PRS counters.
- iii. Exemption on payment of service charge on e-ticket /i-ticket extended till 31st March 2018 or review of the exemption if advised earlier.
- iv. Discount of 0.5% to customers of suburban section on booking of season tickets till 31st March 2018 or any change whichever is earlier.
- v. Provision of 5% discount for digital payment of catering services on IR.

vi. Extension of free cost of accidental insurance cover of upto Rs 10 lakh to confirmed/RAC Railway passengers buying their journey tickets online through IRCTC.

IV. Ministry of Petroleum and Natural Gas

- i. (0.75 %) discount is being given to consumer on the purchase of fuel at the Petrol Pumps of the Oil Marketing Companies (OMCs). The discount is being given in the form of cash back in the bank account of the consumers.
- ii. MDR or any other charges on all debit card transactions at the Retail outlets is not levied to either Dealers or Customers. MDR for debit card transactions are being settled by the OMCs to Banks on the debit cards transactions w.e.f. 16.01.2017.
- iii. OMCs are offering an incentive of Rs.5/- (i.e. an upfront discount of Rs.5/-) on each online refill of LPG payment made by a consumer through credit/debit cards or internet banking w.e.f. 01.01.2017.
- iv. Loyalty programs are currently being run by all OMCs that provide earning of loyalty points on purchase of fuel.
