#### ಕರ್ನಾಟಕ ಸರ್ಕಾರದ ನಡವಳಿಗಳು

ವಿಷಯ	ಸರ್ಕಾರಿ ಪ್ರಾಥಮಿಕ, ಪ್ರೌಢ ಶಾಲೆಗಳು ಮತ್ತು ಪದವಿ ಪೂರ್ವ ಕಾಲೇಜುಗಳಲ್ಲಿ
	ತಂತ್ರಜ್ಞಾನ ಆಧಾರಿತ ಕಲಿಕಾ ಕಾರ್ಯಕ್ರಮ ಅನುಷ್ಠಾನಗೊಳಿಸುವ ಕುರಿತು
ಓದಲಾಗಿದೆ	1. ಸರ್ಕಾರದ ಅಪರ ಮುಖ್ಯ ಕಾರ್ಯದರ್ಶಿಯವರ ಅಧ್ಯಕ್ಷತೆಯಲ್ಲಿ ನಡೆದ
	ಸಭೆಯ ನಡವಳಿ ದಿನಾಂಕ 16.03.2016.
	2. 2016–17ನೇ ಸಾಲಿನ ಆಯವ್ಯಯದ ಘೋಷಣೆ ಸಂಖ್ಯೆ: 102.

# ಪ್ರಸ್ತಾವನೆ:

- 1. ಮೇಲೆ (1) ರಲ್ಲಿ ಓದಲಾದ ನಡವಳಿಯಲ್ಲಿ ಐಸಿಟಿ ಫೇಸ್ 3 ಯೋಜನೆಯನ್ನು 4396 ಶಾಲೆಗಳಲ್ಲಿ ಅನುಷ್ಠಾನಗೊಳಿಸಲು ಆದೇಶ ಹೊರಡಿಸಲಾಗಿತ್ತು. ಸದರಿ ಯೋಜನೆಯಡಿ ಶಾಲೆಗಳಿಗೆ ಕೆಲವು ಉಪಕರಣಗಳನ್ನು ಒದಗಿಸಲಾಗಿತ್ತು ಹಾಗೂ ಉಳಿದ ಉಪಕರಣಗಳನ್ನು ಮತ್ತು ಶೈಕ್ಷಣಿಕ ನಿರ್ವಹಣೆಯನ್ನು ಕಿಯೋನಿಕ್ಸ ಸಂಸ್ಥೆಗೆ ವಹಿಸಲಾಗಿತ್ತು. ಕಿಯೋನಿಕ್ಸ ಸಂಸ್ಥೆಯು ಹಲವು ಕಾರಣಗಳಿಂದ ಸರ್ಕಾರದ ಆದೇಶ ಹೊರಡಿಸಿದ ಕೆಲವು ವರ್ಷಗಳೇ ಗತಿಸಿದರೂ ಯೋಜನೆಯನ್ನು ಅನುಷ್ಠಾನಗೊಳಿಸಿರುವುದಿಲ್ಲ.
- 2. ಈ ನಡುವೆ ಎನ್.ಸಿ.ಇ.ಆರ್.ಟಿ.ಯು ಈ ಹಿಂದೆ ರಾಜ್ಯದಲ್ಲಿ ಅನುಷ್ಠಾನಗೊಳಿಸಿದ ಐಸಿಟಿ ಯೋಜನೆಗಳನ್ನು ಮೌಲ್ಯಮಾಪನ ಮಾಡಿ, ಸದರಿ ಯೋಜನೆಗಳಡಿ ಹೊರ ಗುತ್ತಿಗೆ ಆಧಾರದ ಮೇಲೆ ಪಡೆದ ಶೈಕ್ಷಣಿಕ ಸೇವೆಗಳು ಪರಿಣಾಮಕಾರಿ ಮತ್ತು ಪೋಷಿತವಾಗಿರುವುದಿಲ್ಲ ಎಂದು ಅಭಿಪ್ರಾಯಿಸಿದೆ.
- 3. ಈ ಹಿನ್ನೆಲೆಯಲ್ಲಿ ಶಿಕ್ಷಣ ಇಲಾಖೆ ಮತ್ತು ಇ–ಆಡಳಿತ ಕೇಂದ್ರದ ಅಧಿಕಾರಿಗಳನ್ನೊಳಗೊಂಡ ತಂಡವು ನೆರೆಯ ಕೇರಳ ರಾಜ್ಯಕ್ಕೆ ಭೇಟಿ ನೀಡಿ ಆ ರಾಜ್ಯದಲ್ಲಿ ಐಸಿಟಿ ಯೋಜನೆಯ ಅನುಷ್ಠಾನದ ಕುರಿತು ಅಧ್ಯಯನ ಮಾಡಿ ವರದಿ ಸಲ್ಲಿಸಿರುತ್ತದೆ. ಆ ರಾಜ್ಯದಲ್ಲಿ ಶೈಕ್ಷಣಿಕ ಸೇವೆಗಳನ್ನು ಹೊರಗುತ್ತಿಗೆ ನೀಡುವ ಬದಲು ಶಾಲಾ ಶಿಕ್ಷಕರ ಮುಖೇನ ಅನುಷ್ಠಾನಗೊಳಿಸುತ್ತಿರುವುದು ಮತ್ತು ಯೋಜನೆಯನ್ನು ಯಶಸ್ವಿಯಾಗಿ ಅನುಷ್ಠಾನಗೊಳಿಸಿರುವುದನ್ನು ಪರಿಗಣಿಸಿದೆ. ಅಲ್ಲಿ ಯೋಜನೆಯನ್ನು ಗಣಕ ಶಿಕ್ಷಣಕ್ಕಷ್ಟೇ ಸೀಮಿತಗೊಳಿಸದೆ ಮುಕ್ತ ತಂತ್ರಜ್ಞಾನವನ್ನು ಬಳಸಿಕೊಂಡು ಇ–ವಿಷಯವನ್ನು ಅಭಿವೃದ್ಧಿಪಡಿಸಿ, ಶಿಕ್ಷಣದ ಗುಣಮಟ್ಟದ ವೃದ್ಧಿಗೆ ತೊಡಗಿಸಿಕೊಳ್ಳಲಾಗುತ್ತಿದೆ.
- 4. ಅಪರ ಮುಖ್ಯ ಕಾರ್ಯದರ್ಶಿಗಳು ಮತ್ತು ಅಭಿವೃದ್ದಿ ಆಯುಕ್ತರ ನೇತೃತ್ವದ ಸಭೆಯಲ್ಲಿ ಈ ಎಲ್ಲ ಅಂಶಗಳನ್ನು ಸವಿವರವಾಗಿ ಚರ್ಚಿಸಿ ಪ್ರಸ್ತುತ ಜಾರಿಯಲ್ಲಿರುವ ಐಸಿಟಿ ಫೇಸ್ 3 ಯೋಜನೆಯ

ಬದಲಿಗೆ ಹಾಗೂ ಈಗಾಗಲೇ ರಾಜ್ಯ ಸರ್ಕಾರಿ ಶಾಲೆಗಳಲ್ಲಿ ಅನುಷ್ಠಾನಗೊಳಿಸಲಾಗುತ್ತಿರುವ ಮಾಹಿತಿ ತಂತ್ರಜ್ಞಾನ ಆಧಾರಿತ ಎಜುಸ್ಯಾಟ್, ಐಐಎಂ, ಬೆಂಗಳೂರು ಅವರ ಮೂಲಕ ಅನುಷ್ಠಾನಗೊಳಿಸಲಾಗುತ್ತಿರುವ ಟೆಲಿ ಶಿಕ್ಷಣ ಕಾರ್ಯಕ್ರಮ, ಮಾಹಿತಿ ಸಿಂಧು, ಐಸಿಟಿ ಫೇಸ್–1, ಐಸಿಟಿ ಫೇಸ್–2 ಮತ್ತು ಐಸಿಟಿ ಫೇಸ್–3 ಯೋಜನೆಗಳನ್ನು ಒಂದೇ ಶೀರ್ಷಿಕೆಯಡಿ ತಂದು, ರಾಜ್ಯದ ಎಲ್ಲ ಸರ್ಕಾರಿ ಪ್ರಾಥಮಿಕ, ಪ್ರೌಢ ಶಾಲೆಗಳು ಮತ್ತು ಪದವಿ ಪೂರ್ವ ಕಾಲೇಜುಗಳಲ್ಲಿ ಹಂತ ಹಂತವಾಗಿ ಅನುಷ್ಠಾನಗೊಳಿಸಲು ನಿರ್ಧರಿಸಲಾಗಿರುತ್ತದೆ.

5. ಮೇಲ್ಕಂಡ ಅಂಶಗಳ ಹಿನ್ನೆಲೆಯಲ್ಲಿ ಸರ್ಕಾರವು ಈ ಕೆಳಗಿನಂತೆ ಆದೇಶ ಹೊರಡಿಸಿರುತ್ತದೆ.

# ಸರ್ಕಾರದ ಆದೇಶ ಸಂಖ್ಯೆ: ಇಡಿ 64 ಮಾಹಿತಿ 2016, ಬೆಂಗಳೂರು, ದಿನಾಂಕ: 05.07.2016

- 6. ರಾಜ್ಯದ ಸರ್ಕಾರಿ ಪ್ರಾಥಮಿಕ, ಪ್ರೌಢಶಾಲೆ ಮತ್ತು ಪದವಿ ಪೂರ್ವ ಕಾಲೇಜುಗಳಲ್ಲಿ "ತಂತ್ರಜ್ಞಾನ ಆಧಾರಿತ ಕಲಿಕೆ ಕಾರ್ಯಕ್ರಮ"ವನ್ನು 2016–17ನೇ ಶೈಕ್ಷಣಿಕ ಸಾಲಿನಿಂದ 5 ವರ್ಷಗಳ ಅವಧಿಗೆ ಅನುಷ್ಠಾನಗೊಳಿಸುವುದು. ಕಾರ್ಯಕ್ರಮದ ವಿವರಗಳನ್ನು ಈ ಸರ್ಕಾರದ ಆದೇಶಕ್ಕೆ ಲಗತ್ತಿಸಿದ ಅನುಬಂಧದಲ್ಲಿ ನೀಡಲಾಗಿದೆ.
- 7. ಪ್ರಸ್ತುತ ಶಿಕ್ಷಣ ಇಲಾಖೆಯಲ್ಲಿ ಜಾರಿಗೊಳಿಸಲಾಗುತ್ತಿರುವ ಎಜುಸ್ಯಾಟ್, ಸರ್ವ ಶಿಕ್ಷಣ ಅಭಿಯಾನ ಕಾಯಕ್ರಮದಡಿಯ ಕಂಪ್ಯೂಟರ್ ಆಧಾರಿತ ಕಲಿಕೆ, ಟೆಲ್ಲಿ ಶಿಕ್ಷಣ, ಮತ್ತು ಐಸಿಟಿ–3 ಅನ್ನು "ತಂತ್ರಜ್ಞಾನ ಆಧಾರಿತ ಕಲಿಕಾ ಕಾರ್ಯಕ್ರಮ"ದಡಿ ವಿಲೀನಗೊಳಿಸುವುದು.
- 8. ಈ ಕಾರ್ಯಕ್ರಮದ ಒಂದು ಭಾಗವನ್ನಾಗಿ ಐಟಿ@ಸ್ಕೂಲ್ಸ ಇನ್ ಕರ್ನಾಟಕ ಯೋಜನೆಯನ್ನು ಅನುಷ್ಠಾನಗೊಳಿಸುವುದು.
- 9. ಅಗತ್ಯ ಹಾರ್ಡವೇರ್ ಹಾಗೂ ಸಂಪರ್ಕ ಸೌಲಭ್ಯಗಳಿಗೆ ಅವರ ಸ್ವಂತ ಸಂಪನ್ಮೂಲದಿಂದ ಅನುದಾನ, ಖರೀದಿ ಮತ್ತು ನಿರ್ವಹಣೆ ವ್ಯವಸ್ಥೆ ಮಾಡಿಕೊಂಡ ಅನುದಾನಿತ ಪ್ರೌಢಶಾಲೆ ಮತ್ತು ಕಾಲೇಜುಗಳಿಗೆ ಇಲಾಖೆಯಿಂದ ಶಿಕ್ಷಕರ ತರಬೇತಿ ಮತ್ತು ಇ–ಕಂಟೆಂಟ್ ಬಳಕೆಗೆ ಅವಕಾಶ ನೀಡುವುದು.
- 10. ಮೆ. ಕಿಯೋನಿಕ್ಸ ಸಂಸ್ಥೆಗೆ ಐಸಿಟಿ–3 ಯೋಜನೆಯಡಿ ಹಾರ್ಡವೇರ್ & ಸಾಫ್ಟ್ ವೇರ್ ಸರಬರಾಜು ಹಾಗೂ ಎಜುಕೇಶನ್ ಡೆಲಿವರಿಗಾಗಿ ನೀಡಿದ ಒಪ್ಪಂದವನ್ನು ರದ್ದುಪಡಿಸುವುದು. ಐಸಿಟಿ–3 ಯೋಜನೆಯನ್ನು ಮರುರೂಪಿಸಿ ತಂತ್ರಜ್ಞಾನ ಆಧಾರಿತ ಕಲಿಕಾ ಕಾರ್ಯಕ್ರಮದಡಿ ವಿಲೀನಗೊಳಿಸಲಾಗಿರುವುದರಿಂದ, ಕಿಯೋನಿಕ್ಸ ಸಂಸ್ಥೆಯು ನೀಡಿರುವ ಬ್ಯಾಂಕ್ ಗ್ಯಾರಂಟಿಗಳನ್ನು ಅವರಿಗೆ ಹಿಂತಿರುಗಿಸುವುದು.

- 11. ಯೋಜನೆಯ ಅನುಷ್ಠಾನದ ಪ್ರಗತಿಯನ್ನು ಅಪರ ಮುಖ್ಯ ಕಾರ್ಯದರ್ಶಿಯವರು ಮತ್ತು ಅಭಿವೃದ್ದಿ ಆಯುಕ್ತರ ನೇತೃತ್ವದಲ್ಲಿ ಮೊದಲ ಎರಡು ವರ್ಷಗಳವರೆಗೆ ಪ್ರತಿ ಮಾಹೆ ಹಾಗೂ ಅದರ ನಂತರದಲ್ಲಿ ಪ್ರತಿ ತ್ರೈಮಾಸಿಕ ಪರಿಶೀಲನೆಗೆ ಒಳಪಡಿಸುವುದು. ಕಾರ್ಯಕ್ರಮದ ವ್ಯಾಪ್ತಿ ಹಾಗೂ ಬಜೆಟ್ ನಲ್ಲಿ ಒದಗಿಸಿರುವ ವಾರ್ಷಿಕ ಮಿತಿಯೊಳಗೆ ಅಗತ್ಯ ಬದಲಾವಣೆ ಮತ್ತು ಚಟುವಟಿಕೆಗಳಿಗೆ ಅನುಮೋದನೆ ಪಡೆದುಕೊಳ್ಳತಕ್ಕದ್ದು.
- 12. ಈ ಆದೇಶವನ್ನು ಆರ್ಥಿಕ ಇಲಾಖೆಯ ಟಿಪ್ಪಣಿ ಸಂಖ್ಯೆ 1926 ದಿನಾಂಕ 02.05.2016ರ ಅನ್ವಯ ಹೊರಡಿಸಲಾಗಿದೆ.

ಕರ್ನಾಟಕ ರಾಜ್ಯಪಾಲರ ಆಜ್ಞಾನುಸಾರ ಮತ್ತು ಅವರ ಹೆಸರಿನಲ್ಲಿ

(ಅಷ್ಟರ್ಣ್ ಪಾವಟೆ)

ಆಂತರಿಕ ಆಥಿಗ್# ಸಲಹೆಗಾರರು ಹಾಗೂ

ಉಪ ಕಾರ್ಯದರ್ಶಿ (ಯೋಜನೆ)

∱ಪ್ರಾಥಮಿಕ ಮತ್ತು ಪ್ರೌಢ ಶಿಕ್ಷಣ

# ಪ್ರತಿ:

- 1. ಮಹಾಲೇಖಪಾಲಕರು, ಕರ್ನಾಟಕ, ಬೆಂಗಳೂರು
- 2. ಸರ್ಕಾರದ ಮುಖ್ಯ ಕಾರ್ಯದರ್ಶಿರವರ ಆಪ್ತ ಕಾರ್ಯದರ್ಶಿಗಳು, ಕರ್ನಾಟಕ ಸರ್ಕಾರ ರವರ ಮಾಹಿತಿಗಾಗಿ ಸಲ್ಲಿಸಿದೆ.
- 3. ಪ್ರಧಾನ ಕಾರ್ಯದರ್ಶಿಗಳು, ಆರ್ಥಿಕ ಇಲಾಖೆ, ವಿಧಾನ ಸೌಧ, ಬೆಂಗಳೂರು
- 4. ಕಾರ್ಯದರ್ಶಿಯವರು, ಯೋಜನಾ ಇಲಾಖೆ, ಬಹುಮಹಡಿ ಕಟ್ಟಡ, ಬೆಂಗಳೂರು
- 5. ಆಯುಕ್ತರು, ಸಾರ್ವಜನಿಕ ಶಿಕ್ಷಣ ಇಲಾಖೆ,
- 6. ನಿದೇರ್ಶಕರು, ಪದವಿ ಪೂರ್ವ ಶಿಕ್ಷಣ ಇಲಾಖೆ, ಬೆಂಗಳೂರು.
- 7. ಅಪರ ಅಯುಕ್ತರು, ಸಾರ್ವಜನಿಕ ಶಿಕ್ಷಣ ಇಲಾಖೆ, ಧಾರವಾಡ, ಕಲಬುರಗಿ.
- 8. ನಿರ್ದೇಶಕರು, ಡಿಎಸ್ಇಆರ್ಟಿ, ಬೆಂಗಳೂರು
- 9. ನಿರ್ದೇಶಕರು, ಪ್ರಾಥಮಿಕ ಶಿಕ್ಷಣ/ ಪ್ರೌಢ ಶಿಕ್ಷಣ / ಉರ್ದು ಮತ್ತು ಇತರೆ ಅಲ್ಪಸಂಖ್ಯಾತ ಭಾಷಾ ಶಾಲೆಗಳು, ಸಾರ್ವಜನಿಕ ಶಿಕ್ಷಣ ಇಲಾಖೆ, ಬೆಂಗಳೂರು.
- 10. ನಿರ್ದೇಶಕರು, ಕರ್ನಾಟಕ ಪ್ರೌಢ ಶಿಕ್ಷಣ ಪರೀಕ್ಷಾ ಮಂಡಳಿ, ಬೆಂಗಳೂರು
- 11. ಮಾನ್ಯ ಪ್ರಾಥಮಿಕ ಹಾಗೂ ಪ್ರೌಢ ಶಿಕ್ಷಣ ಸಚಿವರ ಆಪ್ತ ಕಾರ್ಯದರ್ಶಿಗಳು, ವಿಧಾನ ಸೌಧ, ಬೆಂಗಳೂರು
- 12. ನಿರ್ದೇಶಕರು, ಖಜಾನೆ ಇಲಾಖೆ, ವಿಶ್ವೇಶ್ವರಯ್ಯ ಮುಖ್ಯ ಗೋಪುರ, ಬೆಂಗಳೂರು
- 13. ಉಪ ನಿರ್ದೇಶಕರು, ಖಜಾನಾ ಗಣಕ ಕೇಂದ್ರ, #49, ಖನಿಜ ಭವನ, ಬೆಂಗಳೂರು

- 14. ಪ್ರಧಾನ ಕಾರ್ಯದರ್ಶಿಗಳ ಆಪ್ತ ಕಾರ್ಯದರ್ಶಿಗಳು, ಪ್ರಾಥಮಿಕ ಮತ್ತು ಪ್ರೌಢ ಶಿಕ್ಷಣ, ಬೆಂಗಳೂರು
- 15. ಕಛೇರಿ ಪ್ರತಿ

#### Annexure

#### G.O. ED 64 Mahithi 2016

## **Technology Assisted Learning Programme (TALP)**

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- 1. Primary and Secondary Education Department is implementing EDUSAT project covering primary schools, Computer Aided Learning in primary schools, and Tele-Education project covering high schools. In the past, the department had implemented Mahithi Sindhu project, Eleventh Finance Commission project, Revised Class project, ICT1 and ICT2 projects. Based on the experience gained from those projects, it has been decided that the existing initiatives should be brought under a comprehensive programme, which should be teacher driven and focus on subject related e-content. This programme called Technology Assisted Learning Programme (TALP) will cover all Government primary and secondary schools and pre-university colleges. The programmatic approach is expected to provide flexibility and operational efficiency for subject related content creation, teachers' training and delivery mechanisms. Following objectives are envisaged for the programme.
  - i. Ensure Digital Literacy for all students of Class 8 to 12 in Government schools and colleges as per NCERT Curriculum for ICT in Education(Year 1);
  - ii. Complement normal classroom teaching with ICT enabled Teaching and Learning in all subjects;
    - a) Use technology and e-content for improving teaching pedagogy in classes 1 to
       7;
    - b) Use technology and e-content for improving teaching pedagogy as well as for enhancing learning outcomes through hands-on practice of e-content by students in classes 8 and above;
  - iii. Build teachers capacity for their role of drivers of the project at school and college levels as per NCERT Curriculum for Teachers;
  - iv. Track students' learning achievements including that in IT enabled learning;
  - v. Enhance Learning Achievements by way of improving mean score of High School students by 5 percentage in SSLC examination;
  - vi. Establish School / College Management Information System.

## **Programme Componets**

# 2. The programme will have following components.

#### i. EDUSAT

This component will continue with its current coverage of 2601 primary schools, but the focus will be on development of class and subject specific content, proper maintenance of ROTs (Receive Only Terminals) and uplinking facility at DSERT, and establishment of mobile sms based monitoring system.

### ii. Computer Aided Learning in Primary Schools (CAL)

This component will seek to develop class and subject specific content, and to provide equipments (a laptop computer and projector) for delivery of the content to supplement normal class room teaching in around 5325 primary schools with student strength of above 200.

## iii. Tele-Education in High Schools

This component covering 1000 high schools has several problems related to copyright issue and contract conditions adverse to the Government. Subject to satisfactory resolution of those issues, this component will be implemented as per the contract period of total 5 years.

#### iv. IT@Schools in Karnataka

All Government high schools and pre-university colleges will be covered under this component during next five years. During first year, priority will be given to Government high schools included under ICT3 project and to other Government high schools from which teachers show willingness for training and use of technology for IT enabled teaching and learning.

PU colleges will be covered from second year onwards.

This component will replace the ICT3 project. While responsibility for training of teachers from aided high schools and providing e-content may be taken by the state Governments, those schools will be asked to fund, procure and maintain the required hardware and connectivity arrangements. This limitation has become necessary due to lack of adequate funding from the Government of India and other higher priority demands on the funding available from the state's resources for primary and secondary education.

v. Student Achievement Tracking System (SATS)

Web-based UDISE system developed with funding from Infosys Foundation will be used as the base for tracking students' learning achievements. In addition, open source applications installed at State Data Center and school level PCs will be used to monitor usage of e-content by students. If required, customized applications will be procured following competitive process.

vi. Management Information System (MIS)

Web-based UDISE system developed with funding from Infosys Foundation will be used as the base. In addition, more customized applications will be developed.

## **Programme Activities**

- 3. Following major activities will be taken up under the programme.
  - i. Teachers' training

As the programme is to be teacher driven, their capacity building will be the major component. Following three levels of trainings are envisaged in accordance with NCERT curriculum for teachers.

- 1. Level 1: Induction 01 with six Refresher modules 01 to 06
- 2. Level 2: Induction 02
- 3. Level 3: Six Refresher modules 07 to 14 and Induction 03
- a. Induction trainings will be imparted through face to face mode, while refresher modules will be delivered through a mix of online and face to face modes.
- b. Subject teachers and lecturers (science, maths, social science and english in high schools, and physics, chemistry, maths, biology, english, economics, accountacncy and business studies in pre-university colleges) will be encouraged and facilitated to complete at least Level 1, ie, induction 01 with six refresher modules 01 to 06.
- c. One teacher or lecturer per high school or pre-university college will be encouraged to complete Level 2, ie, induction 02, and thereafter perform the role of IT Coordinator in that high school or pre-university college.
- d. About 70 teachers and lecturers (at least 2 per district) will be trained to complete all three levels, ie, induction 01, 02 and 03 and all 14 refresher modules leading to a diploma certificate from NCERT, and thereafter perform the role of district coordinator. The training for these 70 teachers and lecturers will be

on full time basis, without responsibility of classroom teaching during the training duration. The duration will be compressed to about 9 months.

- e. Headmasters and principals will be given short term training in management aspects of the programme.
- f. During the first year, training of at least 2000 high school teachers (1000 science teachers and 1000 maths teachers in same high schools) upto Level 1, 100 teachers upto level 2 and 70 teachers upto level 3 will be completed.
- g. Each of these trainings will have formative and summative assessments.

For the teachers who complete the training programmes successfully and perform the roles envisaged for them (District IT Coordinator, School IT Coordinator, IT trained Subject Teacher), suitable incentives on monthly basis will be provided from the programme budget in consultation with Finance Department.

### ii. Content development

E-content for computer/digital device related competencies and for subject related competencies will be developed largely through appropriate adaptation of the content already developed by NCERT, other state Government and not-for-profit organizations using free and open source software.

Fresh content development will be mostly in the form of recording of teaching lessons/lectures delivered by expert subject teachers/lecturers.

Such content will be hosted at State Data Center and made available to the schools for download in asynchronous mode and repeated use.

FAQ for each subject will be compiled and updated every year. This facility also will be available for download and local storage. Questions asked live by students during IT enabled learning sessions will be answered by their school teachers.

## iii. Connectivity for schools and colleges

Broadband connectivity of 2 MBPS for each school has been recommended by CEG. It is a critical component for effective monitoring of the project and distribution of e-content from SDC to the schools.

CEG's suggestion to seek the connectivity from schools upto Taluka PoP of KSWAN will be followed. Between Taluka PoP and SDC, KSWAN will be used as that arrangement is likely to provide better quality of connectivity.

Consultations will be held with BSNL to get their consent regarding feasibility of providing assured connectivity for each of the schools to be covered under the project. This feasibility check will be done before final selection of school and colleges.

#### iv. Operation and Maintenance Support

Operation and maintenance support will be an integral part of the programme. Expansion of the programme to more Government schools and colleges in second and subsequent years will be taken up only after making adequate arrangements and after earmarking funding for O&M in the schools and colleges already covered in the previous years.

### v. Development of software for SATS and MIS

Infosys Foundation has provided funding to M/s ICT Infracon for development of web-based UDISE (Unique District Information System for School Education). The software developed under that initiative and made available to the state Government free of cost will be used as the base. Further refinements and improved systems will be developed using in-house capabilities of education department and with assistance from NIC.

## vi. Supply of hardware to Government schools and colleges

The supply of hardware will follow and not precede teachers' training and their readiness to use the technology.

As a first step, a laptop computer with dongle based connectivity and a projector per high school or pre-university college will be provided in those schools and colleges where at least two teachers are about to complete level 1 of training. Those teachers will be required to use e-content in their class room teaching.

Once these trained teachers become comfortable in IT enabled teaching over a period of 6 months, the concerned high school or pre-university college will be provided hardware for setting up computer lab for the students.

The CeG has recommended setting up a Central ICT Server in the State Data Center and supplying 15 Mini PCs with 1 Desktop Computer to act as Local Cache and Authentication Server, Open Source Software Linux and Open Source Applications in the concerned school or college. The procurement for the above will be taken up following an open competitive process after obtaining approval of TAP and Empowered Committee headed by Chief Secretary.

# Implementation Arrangements

- 4. The programme will be implemented under the following arrangements.
  - i. Empowered Committee headed by ACS & Development Commissioner Review the progress on monthly basis during first 2 years and thereafter at quarterly basis and provide approvals for course corrections and changes in component wise allocations within the scope approved by the Cabinet and annual outlay provided in the budget.
  - ii. Steering Committee headed by SPD, SSA & RMSA
     Monitor the progress on monthly basis, resolve inter-agency issues and provide guidance for implementation challenges faced by PMU.
  - iii. Programme Management Unit headed by DDPI or Sr. ADPI rank officer

    Implement the project, meet as a group on weekly basis, and report to Director,

    DSERT every fortnight.
    - Services of 3 to 4 IT, management and content professionals from the market will have to be taken to complement the team of officers from the department.
  - iv. District Review Committee headed by CEO, ZP
     This committee with District Informatics Officer-NIC, DDPI, DDPU and DIET
     Principal as members will review the implementation on quarterly basis.
  - v. District Implementation Unit headed by DDPI

    Meet every month to monitor implementation progress and use of project facilities and content by teachers and students, and resolve inter-agency issues.

### **Programme Funding**

- 5. The Budget 2016-17 carries a provision of Rs. 85 Crore for "Computer Literacy in Secondary Schools". Finance Department is being requested, in accordance with the rationalization exercise for plan schemes, to rename this provision for "Technology Assisted Learning Programme" so as to cover Government primary and secondary schools and pre-university colleges and to expand the scope from mere computer literacy to IT enabled learning.
- 6. The funding available from the Government of India for ICT in Schools component of Rashtriya Madhyamik Shiksha Abhiyan (RMSA) and Computer Aided Learning (CAL) under SSA will be appropriately used for supplementing state resources for this programme. An

amount of nearly Rs. 18 Crore is committed already for EDUSAT and Tele-Education projects, leaving a balance of around Rs. 67 Crore for the new components during 2016-17.

7. During subsequent years, the total outlay will be limited to the budgetary funding available within the plan ceiling of the department.

# Implementation Schedule

8. The programme has been planned for implementation over a five-year period to cover Government primary and secondary schools and pre-university colleges as per scope, components and activities detailed in para 2 and 3. The implementation schedule for the activities for the first year is detailed below.

SI. No.	Activity	Time Schedule
1	Setting up PMU	May to July 2016
2	Development of teachers' training syllabus for all three levels	May to June 2016
3	Identification and selection of agency for imparting training	June 2016
4	Training of Master Trainers	July to August 2016
5	Establishment of system for online refresher modules	August 2016
6	Training of 70 teachers upto level 3	July to March 2016
7	Training of teachers and HMs	September to Decembe 2016
8	TAP approval	July 2016
9	E-gov Empowered Committee approval	August 2016
10	Procurement of equipment for classroom teaching	October 2016
11	Mapping of existing e-content to subject syllabus	July 2016
12	Development of new e-content and adaptation of content from open sources	August to December 2016
13	Start of classroom teaching	November 2016
14	Procurement of equipment for computer labs	January to March 2017
15	Start of hands-on practice for students	June 2017

(Aparna Pavate)

IFA and Deputy Secretary and OSD (Planning)

Primary & Secondary Education

