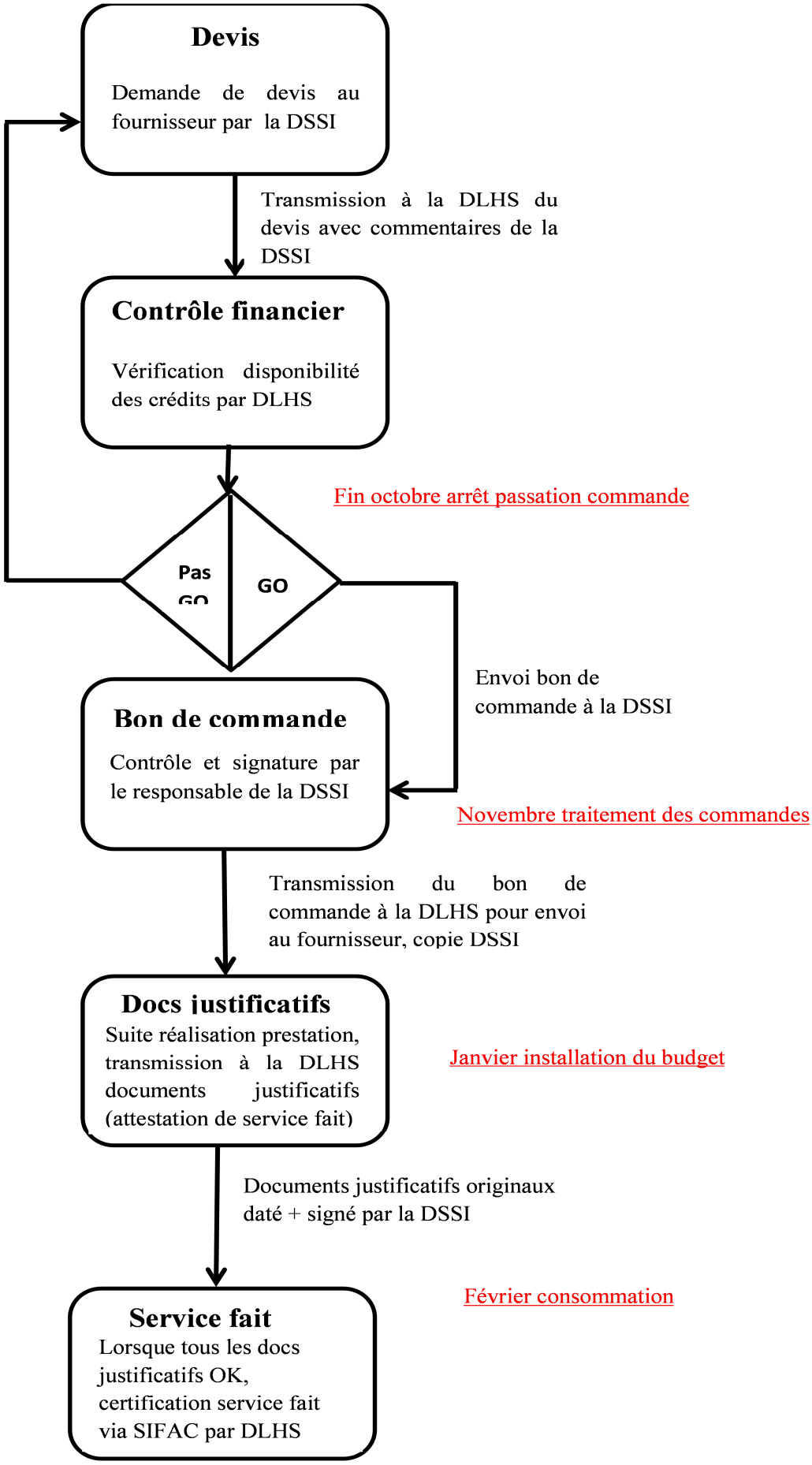Schéma sur le circuit et le traitement de l'engagement